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What is a House?

IT would appear a simple, almost ridiculous question to ask what is a house; but it is a question which of late years has puzzled the judges of the High Court not a little, and has caused them to give decisions which it is not easy to reconcile one with another. It has done more than this, it has caused the expenditure of considerable sums on litigation, and, having regard to the unquestionable state of confusion of the law on this point at the present moment it seems likely that the question will be the cause of much more expenditure and a good deal more litigation.

Many of our readers have at some time in the course of their lives—especially if they are architects, surveyors, or builders—had to do with restrictive covenants in regard to buildings, such as that only a house shall be erected on this or that spot, or that only a house exceeding a particular sum in value shall be built. But with changes in social habits, and changes caused by the want of space in towns, and from other circumstances, we find a constant increase, not only of flats pure and simple, but of buildings containing two or three separate dwellings. It is not, therefore, very surprising that were covenants in deeds come to be applied to the facts of to-day, difficulties, unforeseen when these deeds were signed, crop up.

It will probably explain the present question best if we refer in more or less detail to the latest decision which raises the question "What is a house?" This case is that of Ilford Park Estates, Limited, v. Jacobs (Law Reports 2 Ch.D., 1903, p. 523), and it appears in the October number of the official reports. In the deed which produced the litigation there was a stipulation that on a certain plot of land conveyed to the defendant, "No house should be erected of less value than 300*l.*" One would scarcely have anticipated much difficulty in applying these words. The trouble arose in this way. The defendant proposed to erect a double tenement building—we avoid the word house—on the plot. These tenements were quite distinct and complete in themselves, and had no communication with each other. They were entered by separate front doors set back under a common archway, and the interior staircase leading to the first tenement was cut off by a 4½ in. brick wall from the ground floor tenement. There were separate water-closets on the ground floor in the rear of the building, that belonging to the first floor tenement being entered by a staircase from the kitchen. There was no way of getting from one tenement to the other, except through the front doors. The cost of the whole building would exceed 300*l.*, but the cost of each tenement would be less than that amount, and therefore, said the plaintiff, the defendant is committing a breach of the covenant, and should be prevented by injunction from proceeding with the building.

It may seem at first sight that this was a somewhat unreasonable decision. If there had not been the particular division in the whole building to enable two families to live in it, there is no question that it would have been in accordance with the covenant. Why, then, if for all outward purposes the dwelling was in accord with the covenant, should it be objected to because it was so constructed that two families could live in it? But the reason which may be given in defence of the decision, and which probably influenced the judge's ruling, becomes obvious if we consider what are the motives, in the case of houses built on an estate, for requiring that they should not be below a certain specified value. It is not merely the desire to secure, in an architectural sense, a certain class of building in regard to external appearance; it is the desire to secure a certain class of tenant, or to avoid having tenants on the estate below a certain class. If, for instance, on an estate where houses were specified not to be below a cost of 3,000*l.*, a man built a house of that value but divided it up into a dozen small sets of rooms in flats, the result would be that the owner of the estate would have tenants on it of an inferior class to that which he wished to attract, and whose neighhood would probably be objected to by the superior class of tenants who lived in self-contained houses; to that extent injuring the property. This consideration no doubt complicates the question a good deal from a legal point of view, but it is surely impossible to overlook it.

Apart from this question, no doubt, the definition of a house is capable of being settled purely on grounds of structural character, and ought to be more definitely settled than at present. A house is defined in the Oxford English Dictionary as "a building for human habitation," which for the purpose of settling this kind of dispute is not of much assistance. But in popular opinion a house is, we think, a building intended for human habitation, standing alone or separated vertically from adjoining edifices. It will be immediately asked—Is a building constructed for flats, with a common staircase, a house? The answer can be given at once. It is. For in the case of Kimber v. Admans (Law Reports, 1900, 1 Chancery, 412) it was expressly decided, both by Mr. Justice (now Lord Justice) Cozens-Hardy and by the Court of Appeal, that it was a house. It was, said the judge, none the less a house because it was divided into separate messuages; and Lord Justice Lindley, in the Court of Appeal, said what does "house" mean? "Does it refer to the mode in which the building to be erected is to be sub-divided or let, or does it refer to the aggregate of the rooms, or whatever the contents of the building may consist of? I think that the latter is the meaning, the house is the whole amalgamation." This decision has clearly settled that a building—however large—used as flats is a house: Why then should a building divided into two dwellings only not be a house? It seems that some stress has been laid on the fact that in a block used as flats there is a common staircase, but this fact seems immaterial. It might well be that a block of flats could be constructed, for the sake of privacy with several private staircases. Could it be argued, in such a case, that this fact had made it not one, but several, houses? Practically, in regard to questions of letting, it is so; and in the recent case on this subject a decision of the House of Lords seems to have been regarded as showing that a building with separate tenements and separate staircases was not one

house. That case is Grant v. Langston, decided in 1900, but that case, an appeal from the Court of Session in Scotland, was a decision on a section of the Customs and Inland Revenue Act, 1875, which runs: "Every house or tenement which is occupied solely for the purposes of any trade or business, or of any profession or calling, shall be exempted from the duties," on inhabited houses. In that case the facts were almost exactly the same as in the Ilford Park case, with this difference, that the ground floor was solely used for business purposes, the upper story as a dwelling house. Therefore for the purposes of taxation there was a separate method of using the premises, and this method had to be regarded from the point of view of the Statute. "A hundred years ago there was not much difficulty," said the Lord Chancellor, in saying what was a "house," but builders and architects have so altered the construction of houses, and the habits of people have so altered in relation to them, that the word "house" has acquired an artificial meaning, and the word is no longer the expression of a simple idea. We believe that, looking at the matter from the popular and common point of view, a house is regarded as a building separated vertically from another. Whether separate staircases make two divisions of one building, in the mind of ordinary men two "houses," still remains to be settled; and we hope that the Ilford Park case may come before the Court of Appeal, so that those who have to do professionally with building may have the law settled in a systematic manner. How is a surveyor or an architect to advise a client when there is, according to the law as it stands, a vital difference between a flat and what is often called a maisonette? He will be only the more puzzled if he happens to read legal judgments, when he finds one judge relying on a separate staircase, as making an important difference, and another saying, as Lord Davey does, "whether that difference (the separate staircase) is sufficient to make any real distinction, it is not necessary for me to say." On the whole, we doubt whether, if the Ilford case, or one similar in its facts, should go to the Court of Appeal, it would be decided in the same way as Kimber v Admans. But it is at all events desirable that the law should give professional persons a simple and satisfactory rule, when they come to consider the question—"What is a house?"

DONATELLO.

LITTLE as we know of the life and character of Donatello, apart from his art, something is indicated in the mere fact, of which many who know and appreciate his works are not aware, that his popular name is a diminutive, and his real name Donato. The circumstance seems out of keeping with the usually severe and intellectual character of his work, and therefore we must connect it somehow with his personality, and conclude from it that he was one of that class of artists whose greatness appears mainly in their productions, and who, outside of their art, are not notable for any special seriousness of dignity of character or manner. Even in that more naïve age people would hardly dub a man "Little So-and-so" unless he were rather an ordinary sort of person in everyday life—a man you could clap on the back and crack jokes with. One could not for a moment fancy Michelangelo ever being known as "Buonarottelli." And the consideration is not without its artistic significance. There is a very parallel kind of difference between the works of the two men. Serious is his artistic aim as Donatello was, it is the seriousness rather of a gifted and earnest craftsman to whom the art was everything, than of a great mind to whom the art was a form of expressing thought which was greater and deeper than the artistic form. Behind Michelangelo's sculpture and painting there is something else which is above the visible work, something which prompted it, but which it could only partially express. Such figures as those of the Medici tomb, the Delphic Sybil, the floating figure of the Deity in the roof of the Sistine chapel, have a kind of intellectual significance, which it is impossible to analyse, but which is symbolic of what is greatest in the human intellect. We know and feel that the creator of those works must have been a great and sublime intellect, even apart from his plastic power; and who might rightly exclaim, in regard to his visible productions—"Shall I be judged by only these?" We do not feel this stamp of intellectual greatness, apart from sculptural power, in the works of Donatello. Serious they are, and grave in aim and conception, where the subject is grave, but they do not suggest the existence in their author of a conception beyond what the marble could embody. His figures of various prophets, for instance, are incisive, characteristic, and individualised. There is no doubt as to the kind of personage he wishes to portray; and they strike one as being not so much conceptions as portraits of prophets, as if the actual personages had sat to him. The intensity of realism in them is remarkable; but if one compares them (and it seems the fashion to do so now) with the works of a similar class of Michelangelo, it may be said that we are always conscious of a touch of the *bourgeois* in Donatello: an impression which exactly corresponds with the fact that he should have been called by a kind of pet name of good fellowship. Perhaps the only exception to this is what we have always regarded as his greatest work, the "St. George." This figure, as a symbol of courage, confidence, chastity (for there is all that in it), and total absence of boast or pretentiousness, is the highest ideal of a young Christian soldier that art has produced, and denotes in sculpture a conception of such a character which is quite above the ordinary or popular conception. But in this respect it stands alone among his works.

We are not intending in any way to oppose the modern estimate of Donatello as one of the greatest sculptors of the Italian Renaissance; one of the greatest, in fact, in the history of the art. He was for a long time greatly underestimated; he is an instance of one of those artists whose real powers, not appealing to the popular mind, have been long overlooked. The admirers of Canova, in the early part of the last century, had probably for the most part hardly ever heard of Donatello, and would have been astonished had they been told that he was by far a greater sculptor than their idol; just as, at an earlier period, the worshippers of Bernini would have been equally astonished at a similar judgment between him and Donatello. The modern fame of the latter is one of the remarkable examples of the manner in which truth and sincerity and original power in art will always in the long run assert themselves, even after generations of neglect and indifference. But in all such cases of revival there is a tendency to exaggeration; and there is a certain exaggeration in regard to Donatello at present. There is a tendency to class him with Michelangelo, whereas in reality there is a gulf between them, Michelangelo was a sublime idealist in art. Donatello was a realist—but a realist of exceptional power of execution and individuality of style.

Referring to what we just said as to the significance of his popular appellation, it is rather surprising that Lord Balcarres, in his remarkable monograph on Donatello*, makes no mention at the outset of the fact that this was not his real name (though he alludes to it at the close of the book), and does not even give his proper family name. It is true that the book is a critical and æsthetic essay and not intended as a biography, for which in fact there hardly seem to be any materials worth speaking of. Still, when one takes up a book with the title "Donatello," one may expect to find that information included, without having to go to another book to get it. Mrs. Foster's note to her translation of Vasari states that in the Fiscal register for 1430 he is called "Donato di Nicolo di Betto Bardi," and as Lord Balcarres refers to the fiscal documents in regard to the evidence of the date of his birth, he might conveniently have given us this information at the same time. It is added that in other documents he is referred to as "Donatello," or when mentioned in reference to his works, as "Donatello Fiorentino"—"Little Donato the Florentine." Lord Balcarres accepts Vasari's date for his birth, 1386; not indeed on the evidence of that pleasant biographical romancer, which is worth little enough, but for other reasons which he gives.

The omission of the family name and style is however, about the only fault to be found with Lord Balcarres's book, which as a whole is a most refreshing example of thoroughness both in information and in critical thought. With eleven or twelve exceptions, he tells us, he has seen the original of every existing piece of sculpture, architecture, and painting mentioned in the book; those of Donatello's contemporaries as well as his own works. No pains have been spared, evidently, to give a complete account and estimate of Donatello's art, and the numerous excellent photographs with which the work is accompanied are of the greatest value in giving a kind of all-round exhibition of his works on a small scale, and enabling the reader to institute comparison between works of different periods and different classes of subject.

The figures made for the Duomo at Florence, of which nine, we are told, are

* "Donatello." By Lord Balcarres. London: Duckworth & Co. 1903.

now accepted as the work of Donatello, and which form the earlier illustrations in the book, are for the most part essentially mediæval in feeling; in their directness of expression, their powerful and downright style of execution, and in their absence of grace. One point which the author does not, as far as we observed, allude to, is that in many of them—in the figures, for instance, of Joshua, Jeremiah, and Habakkuk, the heads are too large or the stature too short (whichever way one chooses to put it); a common fault in mediæval work. The fault is the greater because the statues were intended to be placed high up, for which reason some of the details of anatomy are (rightly) exaggerated; but in the matter of stature a figure to be placed high up requires exaggeration rather than shortening, to allow for the effect of perspective. What strikes one as most remarkable in these figures is their strong and almost defiant originality of style and character. They are not beautiful, but they are at the farthest possible remove from artistic commonplace; and it is the commonplace which is the death of art. There is not the same strong originality in the seated figure of St. John, which Lord Balcarres admires so much; dignified it certainly is; but while the figures previously referred to are stamped with Donatello's own impress, the St. John is a figure which any competent sculptor might have produced; it has not in the same degree the sign-manual of Donatello. One of the most remarkable of the Florence Campanile sculptures, and the one perhaps that most makes one think of Michelangelo, is the group of Abraham and Isaac, in which the sculptor has shown such a remarkable power in getting two figures into a niche only intended for one, yet in such a manner that the difficulty of the situation seems only the occasion for an additional force and vigour in the design. Isaac kneels just in front of Abraham, forming one vertical line of composition with him, the nude figure of the youth contrasting with the full drapery of his father in a sculpturesquely effective manner. There have been few finer examples of a technical difficulty turned to artistic advantage.

The St. George is a work of beauty in a sense in which the prophets of the Florence Duomo certainly are not; but it is a beauty stern, severe, and rather mediæval than classic, in spite of the fine proportions of the figure which we find in this case. On a later page Lord Balcarres makes some excellent comments on the relation between Donatello and the classical school of sculpture. Flaxman, as he says, was justified in the remark that some of Donatello's work could be placed beside the best productions of ancient Greece without discredit. The St. George could; but that is not to say that the St. George is Greek in character, or that Donatello was in any way striving to copy the art of the ancients. "Donatello may be the mediæval complement of Phidias, but he is not his artistic offspring." Any one who thought so could not rightly understand either Phidias or Donatello.

The essential distinction between Donatello and the Greek school is shown again in one of the few of his works in which grace and beauty of line predominate—the beautiful and poetic relief of The Annunciation. Here the figure of Mary, rising and slightly drawing herself back in an attitude expressive of surprise mingled with reverence, has almost equal beauty with Greek sculpture, but a beauty of a different kind; not merely physical, but residing partly in spiritual expression, a quality which Greek art knew not. The most Greek-like work of Donatello is the nude bronze David in the Bargello; there is in this something of the simplicity and directness of aim of Greek sculpture; but it must be admitted that it is not equal to Greek work in actual beauty of design: where Donatello comes into competition with Phidias on this ground he is beaten. But the David is no sham antique; there is none of that attempt to be antique which went far to wreck Canova and almost entirely wrecked Gibson; it has distinctly a Renaissance character of its own, but it is the work which might best be put into comparison with what a Greek might have done, because it depends on form only and not on sentiment. On the other hand, no Greek artist would have consented to execute such a thing as the bust of Niccolo da Uzzano; he would not have undertaken anything so ugly; but as an example of what sculpture can do in forcible and characteristic portraiture it is unsurpassed. Another most striking element in Donatello's art is shown in the low relief of the "Pazzi" Madonna at Berlin, in which the antique and mediæval spirit seem to meet; the lines and the style are of Greek severity and purity, but the expression in the Madonna's face is such as no Greek artist ever imagined and no Greek woman (probably) was capable of. This we take to be an undoubted Donatello; if it be not his, there must have been some unknown sculptor as great as he in the same style; and that the same artist should have produced this grave and pathetic work as well as the gay and joyous romp of children of the Cantoria Gallery, is a remarkable testimony to his versatility of power. In this one point, too, the pourtrayal of child life, he was superior to Michelangelo, whose children are not childlike. The greatness of Michelangelo, as Lord Balcarres points out, lay in the fact that he rose to the conception of ideal types of humanity; an abstract position to which Donatello did not attain.

NOTES.

Gardens and Squares. The intention of the London County Council to take action to enable the Council to safeguard the gardens in the London squares and to prevent them from being built over will, we hope, be carried into effect by a Bill in Parliament next year. It is most important that these open spaces should be kept permanently as air spaces, but if Edwardes square falls a victim to the builder, there is no saying how many more may follow. There will, therefore, we trust, be no opposition to the proposed Bill which is desirable in the interest of every class of the community. A bill might also very well be drafted so as to include a clause giving the Council power to take over and take charge of any square garden, which the majority of proprietors desire should be managed by and at the expense of the Council, and, if so managed, then such gardens should be open to the public for the whole or part of each day. There is probably more than one London square which might be of much greater public utility than it is at present, and be much brighter and gayer, and be of equal use to those living near if it were in the hands of the County Council. Another point for consideration arising out of the same matter is whether, having regard to the growth of London, those who are covering what used to be the outskirts with buildings, should not be obliged by law to leave certain open spaces for the public use. As it is some of the more central parts of the metropolis, as, for instance, Bloomsbury, are better supplied with "lungs" than many of the newer districts.

Electric Traction. In considering the future of electric traction it should be remembered that when the possibilities of the system have undergone the exhaustive tests to which steam railways have been submitted during the past seventy or more years, it may be found that entirely new traffic conditions have arisen. Even at the present stage electricity has escaped from the conventional methods associated with steam traction, and has evolved various systems, each specially applicable to some distinctive requirement. Thus electric traction in the form of tramways and railways has been found more or less suitable to the following conditions of transit:—Urban traffic, tunnel work of main line traffic in cities, inter-urban communication, main line traffic, and high-speed express connexion between two or more large cities. Railway companies in all parts of the country already suffer from electric tramway competition, and are seriously considering how they may maintain their position, and the question is being asked whether it would pay to adopt electricity on lines hitherto wedded to steam. It is doubtful whether expenses could be reduced by electrification, and railway managers will be well-advised if they look rather to securing additional traffic by the provision of better facilities and greater comfort for passengers in conjunction with lower fares. In this way they may hope to compete with electric tramways and light railways.

A Light Case. The case of Ruscoe *v.* Groundsell (*Times*, October 29), decided by the Court of Appeal, was somewhat unusual in the facts disclosed. The appellant was the owner of two cottages which had windows overlooking land of the respondent, which, until the year 1891, had always been used as an open yard. In that year the respondent had erected a shed in the yard within a foot of the appellant's windows, which interfered with the light. The appellant brought an action in respect of the interference with the light, but the respondent set up the defence that there was an agreement in writing which prevented the appellant acquiring the right by prescription to the light under Section 3 of the Prescription Act. The agreement relied upon was a tablet in the respondent's wall, on which was engraved: "1816. This stone

is placed by John Atkin to perpetuate John Musgrave's right to build within nine inches of this and any other building." The Court below held that this was an agreement which prevented the plaintiff from acquiring the right to light, but the Court of Appeal reversed this judgment, not on the ground that this tablet could not be an agreement within the statute, but because it was not sufficiently explicit in its terms to constitute an agreement "expressly given" for the particular purpose of defeating a right to the light being acquired.

The Dangers of House-breaking.

An inquest held last week at Westminster throws light upon the reckless methods practised by contractors in the work of demolishing buildings. One of the witnesses, a workman engaged in pulling down a building in Southampton-row, stated that he threw a piece of timber over the party wall after shouting "below," but, misjudging the distance, the wood struck the wall and falling upon the head of a fellow workman fractured his skull. The working foreman stated that he ordered the timber to be thrown down when men were at work below "because they were supposed to know their work," and he calmly suggested that the man who was killed might have escaped if he had looked up when warning was given. The contractor for the work propounded to the coroner the amazing theory that trade competition precluded the adoption of regulations for the safety of the men. It seems that the Factory Acts do not apply to buildings in course of demolition, an omission that ought to be remedied without delay. The case is important as revealing the existence of a most dangerous trade without any regulations in force for the protection of the men employed. We fully endorse the remark of the coroner that legislation is required in the interests of men engaged in hazardous enterprise of the kind.

Another Lift Accident.

We seem to be in the midst of a mild epidemic of mishaps to lifts and hoisting machinery. Once more a serious accident has taken place at the Savoy Hotel extension works, this time in connexion with an electric lift, intended for materials. In spite of notices posted at various places on the works, to the effect that the lift must be used for materials only, five workmen entered the cage early on Saturday last at the top floor of the building. Soon after the descent had been commenced, some part of the apparatus, presumably the rope, gave way and the cage fell with great rapidity to the ground. Fortunately no lives were lost, but the men were more or less seriously injured. For this they have only themselves to blame, and the contractors appear to be free from responsibility. Nevertheless, it is distinctly unsatisfactory that any such failure should take place, for all lifts and hoists ought to be constructed in such a way that the cage may be held up if the ropes break or any part of the mechanism gives way. Even if a goods lift is not used by passengers there must always be danger to innocent bystanders if a heavy cage should be precipitated violently to the ground. The efforts of lift makers to ensure safety cannot be of the least use unless contractors and others will make a point of seeing that safety devices are kept in proper order. A second accident which ocurred at the Savoy Hotel on the same morning seems to strengthen the suggestion that there is something radically wrong with the handling of materials on the extension works. On this occasion a steel girder weighing several tons fell upon one of the workmen, who was removed in a terribly crushed condition to the Charing-cross Hospital. Some explanation as to these constant accidents is certainly desirable.

The Fine Art Society.

An exhibition of water-colours and studies by Sir E. J. Poynter attracted a very large gathering at the private view at the Fine Art Society's gallery on Saturday last. The studies for pictures and single figures are, it need hardly be said, of the greatest value and interest. Among them are various studies for figures and heads for the fine picture of the "Storm Nymphs." One or two studies for a figure of Minerva, especially the one on red paper (24), are fine examples of the design and treatment of drapery. Some studies of armour for the mosaic of St. George in the Houses of Parliament are very fascinating; there is also a small scale study for the whole picture. Among others which particularly interested us are a head drawn in silver-point (7); a nude study (27), peculiarly fine in line and pose—we wish we could see it developed into a picture on a large scale; a noble study for the head of St. John the Evangelist at St. Paul's (53); the study of a head, numbered 95; some architectural sketches in Italy (40 and 45) and in Surrey (48); and two sketches of Walhampton Garden and Wharncliffe Crags (94). The collection of water-colours shows a surprising number of careful works on a small scale, as the relaxations of a painter generally occupied in the severer and more difficult forms of art; as examples of water-colour they would not, for the most part, take the highest place in an exhibition devoted mainly to water-colour art; they have not the true water-colour style; they are rather transcriptions of scenes than pictures in water-colour. An exception is the wonderful little picture entitled "The West Wind, Lynmouth" (125), painted in 1865, showing an effect of wind on a sea viewed from a high point, looking down on it almost, as in what is generally called a bird's-eye view; this would be a remarkable work in any exhibition. In "The Park at Studley Royal" (158), and "A Roman Garden" (179), we have also a broad pictorial character; and the little picture of "Ships in the Bay, Funchal" (145), with the houses in the foreground, is very fascinating, more so than the larger and more elaborate "Morning Sunshine, Funchal" (162), which is rather a topographical study than a picture. Among the others those in which buildings take a prominent part are the best; "The New Barn, Rottingdean" (130), and "Bridgnorth" (155), with its houses piled over one another up the hill, are admirable of their kind; also "Playtime, Rottingdean" (169), and "Dover Castle" (178) dark in the distance against the sky, with the town in the foreground. A small oil painting of "The Vision of Endymion" (121), which finds place in the collection, is perfectly beautiful in the design and treatment of the figure of Diana in an orb of lunar radiance.

Illustrations to the Jungle Book.

At the Dutch Gallery, 14, Brook Street, is a collection of water-colour drawings by two brothers, Mr. Maurice and Mr. Edward Detmold, in illustration of Mowgli and the animals in Mr. Kipling's imaginative work "The Jungle Book." These are not ordinary book illustrations, but large highly-finished coloured drawings, which are in course of being reproduced in colour as a portfolio. Mr. Kipling's extraordinary realisation, as it almost seems, of animal character and the animal point of view is well worth the serious illustration by the artist; and Messrs. Detmold's work is in many respects well worthy of the book it illustrates. There is something a little too strange about some of the drawings; an attempt to force a more striking effect into the animal figure than seems quite natural. "Baloo," for instance, by Mr. E. Detmold is rather—we were going to say a super-human, but we should more correctly say a super-bearish bear, an abnormal creature, and the fur texture is not quite conveyed either; and in "The Buffalo Charge," by the same artist, the whole effect seems too flat and the buffalos do not keep their distance in the picture, but the head of Shere Khan crouching in the foreground is fine. We should like to have seen more of Shere Khan (we assume that every reader knows the ordinary names of these immortal animals); he only appears once. But the picture of "Mowgli and the Red Flower," with Bagheera crouched in a heap and glowering at the fire, is exceedingly powerful; and "Mowgli's Revenge" (Mr. Maurice Detmold) in which we see again the naked man-cub, is admirable; his Mowgli is not so fascinating a boy as the one we saw in the Royal Academy this year, but the conception is much more in accordance with the spirit of the book. Others that are very fine are "The Return from the Elephant Dance," and "Akela, the Lone Wolf," both by Mr. E. Detmold; the last named is quite pathetic. Mr. Maurice Detmold's baboons in the "The Cold Lairs," and his highly-elaborated portraits of Kaa, and of Rikki-tikki-tavi and the cobra, are all remarkable studies. Besides the Jungle-book illustrations, there are two very original sketches, one by each brother, for stained glass windows symbolising "India" and "Africa," and two or three charming pencil drawings of scenery on grey-tinted paper. Altogether a remarkable little exhibition.

Mr. Holiday's Windows.

Mr. Holiday has on show at his studio, Oak Tree House, Hampstead, some exceedingly beautiful stained glass: Three small lights for St. Leonards, St. Andrews, Scotland, and one of the east windows of St. Cuthbert's, Willesden. The latter is a double light window, and the subjects are associated with the raising of Lazarus. On the right is Our Lord leaning on the arm of St. John, and on the left is Martha kneeling by the side of Mary with the news, "The Master is come and calleth for thee." The drawing expresses grace and true religious feeling, and the

work has all the sanctity of good glass, glorified by a blazing harmony of colour.

The Woodbury Gallery.

The small room at the Woodbury Gallery contains a collection of water-colour sketches—they are hardly more than sketches—by Mr. Aubrey Waterfield, of scenes chiefly in Italy and Sicily, which show a good deal of feeling for colour and effect in the rapid transcription of actual scenes. Among those which are especially good are "The Harbour, Palermo" (43); "The Foreign Barge" (70), a study of a barge moored in a tidal river; "Richborough" (72), a very slight sketch of landscape which might be worked out into a fine picture on a larger scale; "Ships at Palermo" (78), showing the picturesque of a collection of sails; and another drawing of Palermo Harbour (80). The drawings, though slight, are very artistic in quality.

Messrs. Tooth & Sons' Gallery.

The exhibition at Messrs. Tooth and Sons' Galleries gives us the opportunity of seeing again two important pictures which have not been seen in public for a good while; Sir L. Alma-Tadema's large painting—much larger than usual with him—"The Picture Gallery, Ancient Rome" (79), and Mr. Peter Graham's "Wind and Rain, a Storm in the Highlands" (67), first exhibited at the Academy many years ago, if we remember right, under the simple title "Wind." It is in a far bolder and less conventional style than those pictures of hills with cattle in the foreground, all on much the same pattern, so to speak, which this artist gives us now. M. Bouguereau's "Printemps" (90) looks much better here than it did in this year's Academy; it is in a more favourable light; it is not a thing one cares for; only, for the kind of thing, it is so very well done. Among the other contents of the large room is a splendidly painted cow, "Vache au pâturage" (57), by Herr Van Marcke—a work of the highest art in its way, only a little spoiled in composition by the posts and cross-rail which have the appearance, from their position, of being put there to support the animal's head. There is a grand little landscape of M. Harpignies—"Paysage, Ciel Orageux" (92), and another by the same great artist, "Clair de Lune" (101), in which however, the moon is too large—it would have perhaps been difficult to give the effect of radiance with a moon of the true angular dimension; and there is a landscape by Mr. J. L. Pickering, "A Bedford Farm" (105), of great originality of style and colour. In the small room Thomas Collier's grand landscape "After the Storm," Pattenham Common" (35), was worth a better light; it is the finest thing in the room, and is hidden away in a corner. Some examples of Prout, Isabey, Creswick, Varley, and G. Fripp, in the same room, take us back in an interesting manner to old schools and methods; while Herbert's "Fishing boats in a storm" (10) is an amusing relic of the scenic stage of marine painting, when inky clouds and a light-brown sail relieved against them formed the regular programme. We have got beyond that nowadays, at all events.

Mr. McLean's Gallery.

We cannot say that the exhibition at No. 7, in the Haymarket is very interesting. One of the best things in it is Mr. McWhirter's "Scotch Firs, Rothiemurchus" (15), a much broader and less conventional landscape than those in which the white birch-tree is the prominent and familiar object; we fancy it has been seen at the Academy, or else one on very similar lines. There is also Herr Israels' fine and pathetic picture "The Missing Boat" (21). Mr. Charles Stuart's "On the Banks of Loch Awe" (34) and Wimperis's "On the Scotch Moors" (45), are good landscapes, and Mr. J. H. C. Millar shows a powerful treatment of sea in "Off the Casquets" (28). Mr. J. W. Godward, whose work is usually prominent at this gallery, having made his mark as a realistic painter of the figure in his "Campaspe" at the Royal Academy some years ago, has never done anything to carry further the promise of that work; "The toilet of Venus" (32), which is in a central position here, is merely an adequately painted but totally uninteresting nude, without either sentiment or (in the higher sense) artistic power; and one cannot go on caring for works of this kind. There are some very good names in the catalogue—such as Rosa Bonheur, Lhermitte, Roybet, Weiss, etc., but they are not represented at their best; they are all pictures worth something, but do not go to constitute a very interesting exhibition. One is reminded again of Isabey by a rather large painting (for him) "The Marketplace at Rouen" (22), but it is in a style which, in the present day, is only historically interesting.

Messrs. Dowdeswell's Galleries.

The exhibition of pictures and drawings of Mr. Charles Whymper, at the Dowdeswell Galleries, under the general title "Fur and Feather," is perhaps in a sense more interesting to sportsmen than to artists, as it consists principally of studies of birds and animals with a landscape, in most cases, merely as background. There is a night view of Westminster Palace, it is true, brought under the general subject by the introduction of a flock of birds passing, but it is hardly a picture of importance as such. Many of the studies of birds are however admirable; and "Ring Plover and Nest" (13) shows an excellent bit of foreground study also. Among others may be mentioned a fine study of an eagle (20),one of a "Moose Feeding" (28), his characteristically heavy head well given; "The Haunt of the Heron" (34), and "A way they have in the Highlands" (43), showing the skins and remains of various predatory animals impaled along the huntsman's fence, including (tell it not in the Shires!) a whole row of foxskins, for in Scotland it is a virtue, and not a crime, to shoot a fox; an instance of what Burke called "geographical morality." But why does Mr. Whymper paint a blackbird (56) with a red bill?

"With that gold dagger of thy bill"

wrote Tennyson; and our observation agrees with the poet's.

The Poverty of R.A. Exhibitors.

It appears that to exhibit a work at the Royal Academy Exhibition is to be taken as an indication that you are a needy person, likely to be in want of money, and open to the blandishments of the money-lender. At all events, that is the natural conclusion from a letter which has been received from one of these gentlemen by an architect who was an exhibitor at the last Academy, and which commences:—

"Dear Sir,—Seeing your name in the Royal Academy catalogue, I venture with apologies to forward my private business note, with respect to money which can be quickly advanced, from 50*l.* to 1,000*l.*, without publicity."

There is something touching in this tender solicitude to relieve the (presumably) struggling artist.

LETTER FROM PARIS.

The Exposition de l'Habitation, now being held in the large hall of the Grand Palais des Champs Elysees, will close its doors to the public on the 15th inst. This is the first exhibition of the kind at Paris, and during the two and a half months since its opening it has enjoyed a moderate success, chiefly with the general public, which has taken an interest in the examples of small economical houses of various taste and design erected in the Exhibition, as models of fully-installed and furnished houses which can be built for intending small house-owners on the instalment plan. The remainder of the Exhibition appears to lack interest, except in one or two portions, to either the public or the professional man, and has not achieved great success in the way of exhibits of a practical or novel nature. The chief exhibits consist of furniture in various forms of modern art; a certain number of the usual type of fixtures for gas and electricity, and several specimens of bronze and ironwork; and known materials for construction, including some of the varieties of armoured concrete construction. The whole, however, has merit as a first venture, and no doubt the organisers will learn from this exhibition much to their advantage for future exhibitions of this kind. This "Exposition internationale de l'Habitation" was sanctioned by a law made in January of this year by the Minister of Public Instruction, to be held at the Grand Palais from July to November. The exhibition was chiefly intended to prove to the public by means of drawings, models, and full-size specimens of family dwellings, that the laws of 1894 and 1896 concerning cheap dwellings could be put to a practical use, and that such dwellings could be built in an economical and yet solid manner, and be provided with all the adjuncts necessary to sanitation and health. Unfortunately, those who have designed the small houses presented to the public at this exhibition, appear to have given more attention to picturesqueness and modern art design than to really useful planning and practical installation, sanitation, and ventilation, and the interiors are not comfortable to English ideas. One of these houses attracts much attention from the fact that it will be given away in a lottery to the visiting public, to be drawn at the closing of the exhibition. The first floor of the Grand Palais is devoted to the display of a very large number of, in some cases, interesting drawings sent in by building societies and various provincial co-operative societies. These galleries are, however, little frequented, except on the days when conferences are held by the various societies.

Amongst the types of small houses are:—An economical dwelling designed by M. Lavirotte, architect; a type of a small dwelling which can be dismounted, by M. Bénouville, architect; a small house constructed by the Societé d'Epargne, shown as a type of house to be built on the instalment system; a small family dwelling, by MM. Bouvard and Umdenstock, architects; and a rather expensive small house in "modern style" designed by M. Charles Slumet, architect. An interesting glass and iron pavilion, with the novelty of armoured glass steps leading up to it on either side, is shown by the Manufacture des Glaces de Saint-Gobain.

For the last few days Paris has been in possession of a third Salon, the necessity for which has not been demonstrated. The public however, crowded to the "Salon d'Automne" on varnishing day, in the brilliantly lighted

basement galleries of the Petit Palais, for this is an evening as well as a morning exhibition, and might in fact better have been confined to the evening, for the daylight lighting is very inadequate in this crypt, with its barred windows. The organisers of the exhibition have spared no pains to render it attractive by means of hangings, electric lights, and fine furniture, but the result is not happy, and the basement of the Petit Palais will hardly become a favourite place for exhibitions. The Salon d'Automne will be open till December 10; what the success in the way of attendance on the ordinary paying days will be, remains to be seen. The Société des Artistes Decorateurs will succeed it, and will probably be very attractive, the President, M. Dubufe, having already shown his taste and perception in the annual arrangement and decoration of the galleries of the new Salon exhibition. The exhibition of the "Syndicat des Peintres et Sculpteurs" is to follow, and then that of the lithographic artists and etchers, to open on April 30. Other demands have been made for the use of the basement galleries, but it is probable that the Municipality will, after these first few exhibitions have taken place, reserve them for the requirements of the permanent Art Gallery. A great part of the artistic possessions of the Municipality are still in the stores at Auteuil; there is sculpture enough to furnish these galleries, where space might also be found for some interesting and valuable architectural models, such as those of the Sorbonne, the Abattoirs, the Halles, etc., and M. Charles Normand's interesting series of comparative models of Parisian streets in their former and their existing state. As to the Salon d'Automne iself, it offers a curious mixture of the characteristics of the two summer Salons. Painters of the Old Salon, such as M. Guillemet, find their conservative works alongside of the productions of MM. Besnard, Carrière, and Jacques Blanche. The set of artists called the "Independants" fill a large space, and the glare of the electric lights is not kind to their eccentricities. In the section of architecture, which, though limited, is interesting—there are designs by MM. Louis Bonnier, Breffendille, Jourdain, Lavirotte, Louis Perin, Schutz, Selmersheim, Tronchet, and others.

The work of constructing the main portion of the new steel viaduct to be erected across the Seine, near the Pont d'Austerlitz, for the new line of Metropolitan Railway, has been entrusted to the Société de Constructions de Levallois-Perret, Paris, the time allowed for the completion of the work being twelve months. The work of constructing and erecting the metallic approaches to the viaduct on either side of the Seine has been given to MM. Daydé and Pillé, constructing engineers at Creil. Premiums of 120*l.* each were awarded to this latter firm and to the Compagnie de Fives-Lille. The contract price for the viaduct is 17,000*l.* and for the approaches 10,000*l.* The viaduct will be in the form of a light metallic arch in two halves, with pivot junctions at the apex and at each abutment. The apex of the arch will be at a height of 45 ft. above the water level, the span of the arch will be 453 ft., and the width of the viaduct nearly 29 ft.

The foundations for the new viaduct at Passy, also for a new line of metropolitan railway, are nearly completed, and the metallic portion of the bridge is rapidly being constructed by the Etablissements de Creil. It is expected that the new line and the viaduct will be ready for service in about twelve months. The viaduct will consist of two portions, one crossing from the Quai de Passy to the Ile des Cygnes, a length of 360 ft., the other portion continuing the bridge as far as the Quai de Grenelle, a distance of 290 ft. The railway line will be placed on the upper portion of the bridge at a height of 52 ft. above the level of the river, the portion reserved for ordinary traffic being at a height of 26 ft.

The proposed construction of a Palace for the reception of royalty visiting Paris, on the ground now occupied by the Depôt de Phares or central station of the French lighthouse service in the Avenue d'Iéna, has been rejected owing to the difficulties which the transfer of the Depôt de Phares to another site would raise. The piece of ground surrounding the Depôt would hardly be large enough for the construction of a suitable palace, and it is considered impossible to find in Paris another piece of ground for the transfer of the Depôt, for a greater difficulty would arise at the present time than that found in 1867, when the Depôt was transferred from the Quai Debilly to its present site, and regulations made that buildings to be constructed on ground within a certain radius of the lighthouse should not be raised above a fixed height, so as not to intercept the rays of light from the Depôt. There is no piece of ground within Paris at the present date where such a right could be maintained.

M. Henri Marcel, a former Conseiller d'Etat and member of the Conseil Supérieur des Beaux Arts, has been appointed Directeur des Beaux Arts in succession to M. Roujon. M. Marcel is not only an accomplished amateur and connoisseur in Art, but also an able writer and a frequent contributor to the *Gazette des Beaux Arts*, the *Revue de l'Art*, and *Art et Decoration*. He is the author of a noteworthy work on Millet, and has in preparation another on Velasquez. The nomination of M. Roujon to the position of Perpetual Secretary of the Académie des Beaux Arts has left a vacancy to be filled up in that section of the Institute, which will give rise to a good deal of competition. Among the principal candidates are M. Georges Berger, President of the Union Centrale des Arts Décoratifs; M. Jules Comte, a former directeur of Bâtiments Civils; M. Bouchot, curator of the Cabinet des Estampes; M. Gonse, curator of the Louvre; and M. Charles Normand, President of the Société des Amis des Monuments Parisiens.

The demands of street improvement have necessitated the demolition of the Hôpital Laennec in the Rue de Sèvres; and in spite of the protests of the Vieux Paris Committee, the chapel of the hospital, which is rich in historic associations, and contains the tombs of the Turgot family, who played so important a part in the history of Paris and of France, is to be destroyed.

It is announced that the conservatories on the Cours la Reine (built in connexion with the 1900 exhibition) are not to be pulled down but are to be made use of for an annual floral exhibition. The site occupied in that exhibition by the Ville de Paris Pavilion, is to be transformed into a large grass lawn, surrounded by chestnut trees, and sloping down towards the water's edge. This alteration will complete, very happily, the decorative treatment of the Cours la Reine, which extends to the Place de la Concorde.

M. Paul Guadet, architect, Inspecteur de Batiments Civils, has been nominated architect of the Legation of France at Tangiers, in the place of M. Bénard, who has been commissioned by the Mexican Government to construct the Parliament House at Mexico. M. Bénard has therefore resigned his functions and has left for Mexico, whilst M. Guadet has gone to Tangiers to look over the site for the future palace, and consider the materials afforded by the locality. The proposed site is a large one, close to the shore, covered with gardens, and said to be very beautiful.

The administration of the Grand Hotel in the Boulevard des Capucines has opened a competition amongst architects of all nations for schemes for the complete transformation of the existing open courtyard into a covered winter garden and the arrangement of a new carriage entrance in the Rue Scribe. The designs are to be sent in by December 15th, and premiums to the sum of 240*l.* will be distributed amongst the authors of the three premiated schemes.

At its last meeting, presided over by M. Frantz Jourdain, the Commission du Nouveau Paris instructed several of its members to submit schemes for the transformation and rearrangement of the Palais Royal. The chosen members are: MM. Ch. Plumet, Hector Guimard, Castelin, Lavirotte, Pierre Selmersheim, Collin, Denis, Bénard, and Henri Bans, all enthusiastic devotees of "Art Nouveau."

At a meeting of the Society des Amis des Monuments Parisiens, to be held on the 3rd inst, M. Charles Normand will read a paper on the Metropolitan of 1856, and the questions concerning the proposed destruction of the Parc de la Muette, the future stations of the Metropolitan Railway and their design, and the re-arrangement of the Champ de Mars.

The Chambre des Deputés has nominated a commission to prepare at once the construction of a new Parliament Hall, or "Salle des Séances." A sum of 120,000*l.* will be devoted to this work, and M. Buquet, the architect of the Chambre, is at present examining the nature of the ground in the large countyard where it is proposed to erect the new hall.

A jury composed of painters, sculptors, and architects has awarded the Prix Lattainville of a value of 80*l.* to Mlle. Rondanay, pupil of M. Humbert. The programme given by M. Pascal required designs for the decoration of the end wall of a grand staircase leading to a library, as well as the decoration of the vaulted roof, and also the landing and the lantern lighting the staircase. The competitors were to represent Letters, Sciences, and Arts framed in a decoration of architecture and ornamentation. The award of the prize to a female student is interesting to those who are partisans of allowing these students to compete in the Prix de Rome competitions.

The Association Provinciale des Architectes has opened a competition amongst young students, members of one of the provincial schools of fine arts, for designs for "Un Hôtel des Postes et Telégraphes" for a town of 10,000 inhabitants.

The Municipality of Arles has decided to demolish the old ramparts which are historical and are well-known for their picturesque and artistic value. The Minister of Fine Arts has, however, saved one portion from destruction by classing as a 'monument historique" the Maison d'Ozé with its two towers of the sixteenth century flanking the Porte de la Cavalerie close to the railway station.

M. Deglane, the architect of the Grand Palais des Champs Elysées, has received from the State an order to construct a palace at Dakar for the Governor, this town becoming the capital of French West Africa. M. Deglane intends to build the palace entirely of artificial stone to be made on the spot with powdered stone, cement, lime, and an agglomerate to be imported from Europe.

A competition has been opened for designs and plans for the reconstruction of the abattoirs of Angers. The work is to cost 40,000*l.*, and premiums of 200*l.*, 120*l.*, and 40*l.* will be awarded.

One of the most celebrated paintings of De Neuville, the "Cimetière de Saint Privat," has been offered to the State by a well-known deal, M. Roland Knoedler. It will be placed in the Louvre.

The death is announced, at the age of sixty-six, of M. Léon Schindler, member of the Société Centrale des Architectes. He was a pupil of Lequeux, and his first professional work consisted in acting as resident architect for the works of the Collége des Jesuites, Rue des Postes. In 1862, he was attached officially to the service of the Department of the Seine, as Architecte Inspecteur of the Asile d'Aliénés at Evrard.

BROMLEY PUBLIC LIBRARY COMPETITION.

In this competition fifty sets have been sent in, and with a few exceptions they are decidedly mediocre; in fact, several are so hopeless that they are unworthy of serious consideration, except to illustrate the surprising incapability of their authors, both as designers and draughtsmen.

The conditions supplied a well-arranged plan and section of the lending library, magazine, reference, and news rooms in block, and in this respect were ideal, the competition becoming merely a matter of architectural treatment.

The winning design, by Messrs. Squire, Myers, and Petch, of 19, Pond-place, South Kensington, is well chosen. In the plan the authors have introduced several accessories which are not required in a small branch library, such as librarian's room and anteroom, and private entrance, public lavatories, etc., but the design of the façade is on the whole the most satisfactory. It is a Renaissance design in stone, and is cleverly concentrated by the use of simple flanks to a three-quarter columned central feature carried up both stories, the attic windows being set back behind the balustrade. The result is dignified and suitable.

The second premium is divided by Mr. C. Harold Norton, 14, Bedford-row, and Mr. A. F. McGregor Milligan, South Castle-street, Liverpool. Mr. Norton's plan is better than that of the winner, as the requirements have been adhered to and the simplicity of the plan preserved. The unfortunate introduction of a cornice dividing the central part of the façade in the middle, spoils an otherwise able design. The design by Mr. Milligan does not merit its position. A useless service passage is introduced in the ground plan, and the elevation is feeble.

No. 6 diverges from the accepted method of lighting, and introduces an octagonal central gallery over the lending library, which draws light from the upper story windows. This is the only design treated in this manner, and is successfully handled. The elevations are designed in a quiet, rather domestic, late Renaissance of brick and stone—charming, but not monumental enough. No. 5 is a heavy Renaissance design, which cubes much too high. No. 26 also suffers from being too generous, with a story higher than necessary.

No. 17 is one of the few with the borrowers' space placed laterally, and is, as in all the others, a failure. The façade, in brick and stone, is treated in two three-quarter gables of doubtful character.

No. 1 is a bad plan, the author having ignored the plan supplied. The façade is in brick, with some merit, but quite unsuitable.

No. 14 is in l'Art Noveau style, a beautifully-drawn freak of the rounded angle order.

No. 36 is the best-looking set of drawings sent in, with a bad plan, which gives no supervision. The elevation is a clever study of Renaissance in stone, with large, circular-headed windows to lending library, and a well-proportioned order to both stories.

No. 7 is a clever design, with a large French roof and attics, with scarcely enough glass area to the lending library.

No. 10 is a Renaissance design with some merit, and an unaccountable circular-headed pediment in the middle of the façade.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

OPENING MEETING OF NEW SESSION.

The opening meeting of Session 1903-1904 of the Royal Institute of British Architects was held on Monday evening at No. 9, Conduit-street, Regent-street, W., Mr. Aston Webb, R.A., F.S.A., President, in the chair.

The late Mr. H. W. Brewer.

The minutes of last meeting having been taken as read,

Mr. Alex. Graham, hon. secretary, said he was sorry to say that since the last meeting, in June, several members of the Institute had passed away. The first name he had to mention was that of a gentleman of high distinction as an architectural draughtsman, a man of great research, and a man possessed with high imaginative powers, *i.e.*, Mr. H. W. Brewer. To younger men, Mr. Brewer was probably little more than a name,* but to those who were acquainted with him in the sixties and seventies of the last century Mr. Brewer stood pre-eminent as a draughtsman of the highest order, and those who were acquainted with the pages of the *Builder* would remember the splendid drawings Mr. Brewer executed for that Journal from 1854 down to recent days. Mr. Brewer was a draughtsman of high quality, especially in his knowledge of mediæval work, not only in this country, but also in France and in Germany. Mr. Brewer seemed in his interpretation of the works of mediæval masters to have caught the spirit of the men who designed the great works which we all admired, and his imaginative powers were shown particularly in a panoramic view, which was published some fifteen years ago in the *Builder*, of Old London in the time of Henry VIII. This was followed by a similar treatment of Old Paris, and there were others of a similar nature which had appeared in the pages of the *Builder*. Mr. Brewer's death was a great loss, not only to the Institute—he was elected an honorary Associate in 1897—but to the whole profession. In earlier days, when photography was in its infancy, and the arts of reproduction which are so familiar to us were unknown, Mr. Brewer's drawings, executed by himself and cut by himself on the wood, were very remarkable productions. He could not help thinking that some of the deceased gentleman's drawings might be exhibited in that room. Thanks to the kindness of the editor and proprietors of the *Builder*, some of Mr. Brewer's original works had been exhibited in Catherine-street, but it was very desirable that on some evening early in the session, when there would be a large gathering of students and others, the drawings should be exhibited. It was his mournful duty to move that a letter of sympathy be sent to the relatives of Mr. Brewer, not only sympathising with them in their loss, but expressing on the part of the Institute a sense of the great part Mr. Brewer took in architectural progress during the last forty years. He would put that resolution, and ask those present to endorse it in the usual way.

The motion was agreed to in silence.

Other Deceased Members.

Mr. Graham also announced the death of Professor W. H. Corfield, M.D., consulting adviser on matters of sanitation to H.M. Office of Works, and an honorary Associate of the Institute since 1883. The name of Dr. Corfield was so familiar to all of them, and the work he had done was so fully recognised, that it was unnecessary for him to dilate on them. Professor Corfield was a pioneer in many matters connected with hygiene, and those of them who had, through choice or necessity, to make a study of sanitary science had always found in Dr. Corfield a man who assisted them in every possible way. His labours were not only recognised in this country, but had met with full appreciation in foreign countries, and it was very satisfactory to the Institute as a body to know that Dr. Corfield worked with them as a colleague for many years. He desired to move a resolution similar to the one agreed to in regard to Mr. Brewer.

This having been agreed to, Mr. Graham further announced the decease of Mr. H. Ford, elected a Fellow in 1870. Mr. Ford had a large practice in the City of London. Another name was that of Mr. A. J. Barlow, Associate, elected in 1880. The last name he had to mention was that of Mr. J. M. Brooks, elected in 1881, son of their lamented friend and colleague James Brooks, who a few years ago received the Royal Gold Medal of the Institute.

Statutory Examinations.

Mr. Locke, secretary, announced the results of the statutory examinations held by the Institute on the 22nd and 23rd October. There were seven candidates, of whom five passed and two failed. The successful candidates were Messrs. W. G. Green, Acton; E. W. Lees, London; A. George Morrice, London; A. P. Stokes, London.

These gentlemen had been awarded by the Council certificates of competency to act as district surveyors under the London Building Act.

In the Building Surveyors' examination the following candidate was successful: Mr. W. D. Jenkins, Sparkhill, Birmingham. This gentleman had been awarded by the Council a certificate of competency to act as building surveyor under local authorities.

President's Address.

The names of some candidates for membership having been read,

The President read the following address:—

Colleagues, Ladies, and Gentlemen,—For a second time it is my privilege as President to address you on matters of interest and importance in connexion with architecture and this Institute. But first permit me to express a hope that all present have been able to take, since we last met some change of air and scene so necessary for the due performance of our work. During the last twelve months there has not, perhaps, been any very striking development to chronicle. Our work is of such a character that twelve months is but a short period. Still, events have occurred which may have far-reaching effects in the future, both as regards our art and this Institute, and it will be my duty to refer to some of them in my address this evening.

As regards our membership, ninety-seven new members have been elected during the year, and we have lost fifty-five by death or resignation. Of our new members, twenty-six are Fellows, seventy-one Associates, and, in addition, thirteen Associates have been elected to the rank of Fellow. All this is satisfactory, as far as it goes, but you will all agree with me that it does not go nearly far enough; and we must not be content until this Institute includes among its members all reputable practising architects or, at any rate, until we are satisfied that we have thoroughly investigated and removed as far as is possible all reasons for this not being so.

One matter concerning the affairs of this Institute, which I fear must shortly be dealt with, is the question of the election of Fellows, which, under existing rules, can hardly be said to meet the views of anybody. It is not very satisfactory to the Fellows on account of its indefiniteness and uncertainty; and it is even less so, I have reason to believe, to Associates, who, not unnaturally, object to find admission to Fellowship less difficult than entrance to Associateship. And yet it is by no means easy to devise a remedy for this state of things. It is easy to see that everyone wishing to join the Institute must do so as an Associate, but under our Charter everyone desirous of becoming an Associate must first pass an examination, but there are, admittedly, many whom we should like to join us, who, from their age or standing, or want of leisure, could hardly be asked to submit themselves to the examination qualifying for Associateship.

How is this difficulty to be overcome? The only way that occurs to me is to do as was done in the case of Associates; and to fix a date, say four or five years hence, after which, except in very exceptional circumstances, entrance to Fellowship otherwise than through the Associateship is absolutely closed. The fact that this would make the Fellowship somewhat more difficult to attain would increase its value in the eyes of the profession and the public, and would, in my opinion, rather attract than discourage membership. It was distinctly so in the case of the Associateship, and I believe would prove to be the same in the higher grade. But, if this were done, it would be necessary, during the intervening period, to open the doors to the Fellowship wider than at present, so that no reputable practising architect desiring to join us should be debarred from doing so. This is a question for the members of the Institute themselves to settle, and the Council, I am sure, would be glad to hear a full expression of opinion on a subject that must affect the future welfare of the Institute. I hope that an evening may be found during the session when this matter may be fully discussed.

One event of last session, that I hope may lead to good results, was the meeting of the Presidents of the Allied Societies on the day after our annual dinner, when together with our Vice-President, Past-Presidents, and myself, we informally discussed matters of interest, amongst these being the facilities for architectural education at present available in the various centres (especially in regard to the establishment of day schools); the question of the compulsory registration of architects; the admission to Fellowship of Presidents of Allied Societies, and of members unanimously proposed by an Allied Society. No resolutions were moved, but valuable information was exchanged.

Another interesting event was the visit of Mr. C. F. McKim, of New York, to receive the Royal Gold Medal. Mr. McKim brought with him a large number of illustrations of the work of himself and his colleagues, and has left behind him, I am sure, an enhanced opinion of the progress of architecture in America at its best, and a pleasant reminder of the public spirit which is alive in that great country to ensure the beautifying and ennoblement of her cities. May I also add that Mr. McKim has left amongst those he met a very high appreciation of the man himself, his personality, and a desire to see him some day again amongst us?

I have to thank you for the encouragement you gave, by your presence in goodly numbers, to my experiment of informal "At Homes." They afforded us an opportunity for seeing for the first time a large number of the working drawings, sketches, and designs of two very distinguished architects, John Francis Bentley and William Eden Nesfield (which could only be shown in an informal way), and at the same time of bringing many professional friends together for a short time in friendly intercourse; and they have not, therefore, I hope, ended altogether in smoke! I propose to continue the experiment this session, and trust you will again contribute to their success by your presence. One evening I hope to have the drawings of another eminent architect, the late John Loughborough Pearson; and it has occurred to me that the exhibition, on another evening, of the water-colour sketches made by ourselves during our holidays might be of interest—painters, of course, being excluded on that occasion!

Another event in which this Institute has taken a keen interest is the acquisition of a permanent home by the Architectural Association. It is a striking testimony to the high

* We cannot understand how Mr. Graham came to make this remark, seeing that we had been publishing drawings by Mr. Brewer every year up to our last New Year's number in January of this year; and the last drawing which he made for us is still unpublished, and will be issued with our next New Year's number.—Ed.

appreciation in which the work done by the Architectural Association is held that the Architectural Museum buildings and their contents should have been handed over to the Association as a free gift by the unanimous wish of the subscribers to the museum, accompanied, I believe, by the full approval of all members of the profession. But the Association have a serious work in hand to adapt the premises to their present and future requirements, involving them in an outlay far beyond the means at present at their disposal. Your Council felt sure they were interpreting your desire to show the interest of the Institute in the work, and have voted a sum of 500*l.* towards the Building Fund.

The Day School so successfully started by the Association seems destined in its new premises to work almost a revolution in our architectural education (or want of it); but as I went through the spacious courts of the Ecole des Beaux Arts the other day, with their full-size models of columns and entablatures, together with examples of Renaissance and Mediæval work, I said to myself: the Architectural Association are only at the commencement of their work; they cannot stop, but must go on, and when they have completed their schools must complete and extend their museum, and we older architects must take care to see them through with it. It has been a pleasure to the Institute for many years to lend this room to the Association for their meetings, and we shall miss them when they go; but we hope often to have their presence amongst us, for we need the energy and initiative of the younger men.

In this connexion I may briefly refer to the question of our own premises, mentioned in my last address. I then ventured to express my own opinion that this question of premises, though very important, could hardly be considered an immediately pressing one; and the question of a joint building has now been solved by the gift of premises to the Association. At the same time your Council and officers have not lost sight of the matter, and it is possible they may have some proposals to lay before you in connexion with this subject later in the session.

Another event must be noted, *i.e.*, the adoption and issue of a form of conditions of contract, which has been accepted both by the Institute of Builders and ourselves. (It is some indication of the importance of this document, and the complicated nature of some of an architect's work outside his art, that this result has taken some eight years to arrive at.) This contract, while recognising the absolute authority of the architect over the workmanship and materials used on the works, has defined, as far as is possible, the relative responsibilities and duties of the client, the architect, and the contractor; and though it is, of course, too much to expect that any document could be drawn that would meet every case that may arise, we believe it will be found of great use to all engaged in building operations.

The last Council election was made the occasion of bringing before us again very prominently the question of the compulsory registration of architects, a subject which also made its appearance in the rolumns of the *Times* and in the list of Bills which were presented to Parliament during last Session. As stated in a circular sent round to members of the profession, it is some sixteen years since this matter was first formally brought forward and a Bill prepared; but in reality the subject was mooted by members of the Institute as long ago as 1854, and brought up in subsequent years, without, however, any action being taken. I mention these dates to show that inaction on the part of this Institute has been deliberate and intentional, and does not arise from any want of due consideration of so important a matter. For myself, I was honorary secretary of this Institute from 1889 to 1892, when the question of registration was brought most prominently forward, and thus became well acquainted with the details of the proposals and the arguments for and against them. Those arguments appear to me to remain much the same to-day, on both sides, as they were then. Then, as now, there was a considerable body of opinion in favour of the proposal, and I certainly do not wish in any way to minimise the amount of it. Then, as now, there was a considerable body of opinion strongly against it, and under these circumstances I venture to say, gentlemen, the thing for the moment is outside the realm of practical politics; for any experienced politician will tell you that Parliament would never grant compulsory powers of the sort proposed, except at the general request of the members of the profession interested, and at present there can be no doubt that the profession is sharply divided on the point.

I think I ought to say to you quite frankly, as your President, that personally I am not a supporter of the proposal at the present time, though I agree that the large body of opinion in favour of it cannot and must not be ignored. Evils there undoubtedly are, which should be removed; but, personally, I would try every possible alternative before applying such drastic remedies as those proposed by this compulsory registration, which, I believe, must be repugnant to every artist, whether a supporter of the proposal or not. I am well aware that there are a large number of architects, especially amongst those practising outside the Metropolitan area, who are in favour of compulsory registration; but I find, amongst the leaders of our profession, those whose work we admire, and on whose judgment we rely, that they are, as far as I know, almost to a man, strongly against the proposal; and I say again therefore to myself, we should hopelessly divide the profession by pressing the proposal at the present time. Consideration it is bound to have, but acceptance is hardly likely to be obtained by putting a pistol at the head of the Institute and demanding registration or our life. Remember, this proposal would not only register certain architects, but would decline to register others. A registration which gives one man a right to call himself an architect, and refuses it to another, is a very difficult and serious matter; and I must say I should be sorry myself to have to pronounce judgment, for while "A" may think "X" a good architect, "B" may not consider him an architect at all. Who, then, is to decide?

I think I clearly understand the grievance against which registration is proposed as a remedy. Put quite shortly it is this:—An architect, let us say, in a country town, is endeavouring to carry out artistic work and to uphold the honour of the profession; but he finds much of the work he considers should go to him taken up by others whom he knows are not artists in any sense of the word, and are untrammelled by any notions of honourable professional conduct, and have no right to be called architects at all. So he says let a law be passed that every man must pass a prescribed examination before he can call himself an architect, and then will the public be able to separate the sheep from the goats. I admit the grievance, and sympathise most sincerely with my friend; but I doubt the wisdom or efficacy of the proposed remedy.

I would ask this question of those who favour registration:—Is it proposed for the benefit of architecture or architects? I know they will say and believe it is for *both*. Well, then, take the benefit to architecture first, as it should be taken. It will be admitted, I think, that good architects will do just as good architecture whether they are registered or not; it will therefore make no difference whatever to our best architecture. Our friend replies: that may be so, still it will prevent an enormous amount of bad architecture being perpetrated throughout the country by incompetent men. I take leave to doubt this; I fear that when registration became compulsory, though you would register much *ability*, you would also register much *inability*. That is the danger, and I fancy our friend would find himself worse off than before. Much of our building (it cannot be called architecture), is done by speculating builders, auctioneers, etc., who very properly do not now call themselves architects, and registration would not affect them as far as I understand it. It is true they would not be able to recover their charges as architects in a Court of Law, but builders are not paid by fees, and they would not call themselves architects. They will continue their work, and be perhaps even helped, for probably some of the best amongst them would work up and pass the examination and carry on their poor buildings under the full authority and sanction of a Government diploma, and we shall see on the window blind "Estate Agent and Government Architect," and many such like combinations. Will this improve our architecture, or help our friend?

Then, again, we have generally thought a man who has the right to call himself an architect acquires the right by the buildings he has designed and whose erection he has superintended. This is the test we ask of our own Fellows, but this compulsory registration would require that he be hall-marked "Architect" by Government examination, probably before he has designed or superintended a single building. Surely this is putting the cart before the horse, and cheapening the title of architect! We admit Associates by examination, but require seven years to elapse and evidence of actual building before he becomes a Fellow. Suppose a man obtains the Government diploma, and his buildings turn out unsatisfactory, what will happen then? In fact, is it possible to decide on paper whether a man is an architect, or on the same evidence to deny him that honourable name?

Another difficulty is:—What standard of architectural excellence is to be fixed for the right of this Government diploma? It must, apparently be the same for the practitioner in a distant country district as for our larger cities. Is this fair or desirable?

Again I would ask, sympathising, as I do, all the while with this grievance: is all this ticketing and docketing compatible with our art? Protection is in the air, I know, and I am not rash enough to express any opinion upon it. But I do know that Art has always been free. Let us not be the ones to shackle it. An artist is born, not made; no questions or answers admit him into the fold, only his work. We are constantly being told that doctors and lawyers have these Government diplomas, and so ought we; and if we venture to suggest that painters, sculptors, and engineers have none and require none, we are told that has nothing to do with it. But why not? Are not painting, sculpture and engineering more nearly allied to architecture than law or medicine? I should have thought so.

Then, as regards its benefits to architects. We are told that this diploma is essential in order to make the lazy ones work; the Institute examination, they say, is not sufficient inducement, and we must therefore compel them to come in. I can only say again, I do not think so. The lazy men we should admit, for this reason, had far better remain outside. Again, as regards the benefit to architects, I would ask you to remember that if this proposal were legalised to-morrow, the engineer, the borough surveyor, and surveyor, if members of the Institution of Civil Engineers or the Surveyor's Institution, would be exempted from all restrictions, and would continue to practise architecture precisely as they do at present. The registered architect would come to be looked upon more as a luxury or as a consultant, to be called in on very important matters only, and so a large part of the work, which is already so greatly encroached upon, would finally slip away from architects altogether. It would also be necessary that all those calling themselves architects at the time of the passing of the Bill, whatever their qualifications, would receive the Government diploma, so I am afraid our friend in the country town would receive no relief in his lifetime.

The words of the memorial addressed to the Council in 1891 appear to me as true now as then:—"That a diploma of architecture would be a fallacious distinction, equally useless as a guide to the public and misleading as an object for the efforts of the student." And, further, "that no legislation can protect the public from bad design." While saying this, I would like those who are in favour of the compulsory registration of architects to believe that we are entirely in sympathy with every effort to raise the status of architecture and the architect in this country, and it is on this very account that I have ventured to discuss the matter at some length this evening. It seems to me that we must first come to some agreement amongst ourselves as to the standard to be set up, and how it is to be tested, and until this is defined registration would be useless and fallacious.

I am reminded of a story you will probably all remember, told by the late Bishop of London at one of our dinners, of an Oxford Don leaning over a wall and watching two undergraduates trying to induce a tortoise to put his head out of his shell by holding out some tempting bait, but without result; and at last the Don quietly saying to those undergraduates, "Don't you think, gentlemen, you had better try the other end?" And I would venture to say to you, gentlemen, don't you think we had better try the other end? If, as I think, there is no probability of getting what we all want —a higher appreciation of architecture by legislation at the present time—would it not

be better to redouble our efforts to gain the same results by raising the standard of architecture amongst ourselves, by encouraging the higher education of our young men, so that in time superior attainments may make membership of this Institute a recognised qualification in the eyes of the public, as I believe is the case already, to a great extent, not only at home but in the Colonies also?

Professor Kerr, in a very interesting address on registration, said it was open to question whether, when the Institute started standing committees on art, literature, practice, and science, it should not have added a fifth on Education, and I think he was right. Education is everywhere the cry, and if this Institute is to take a more prominent part in architectural education, it will be necessary to depart, to some extent, from the position it has taken in this matter up to the present time.

Up to the present we have been satisfied, and I think rightly so, by endeavouring to arrive at and suggest a standard of architectural education by means of our examinations, leaving the preparation and education of students to others. During the last session your Council had laid before them for their consideration certain draft proposals on architectural education, drawn up by a body of well-known architects interested in this question, though not at present members of this Institute, including such well-known names as Mr. Reginald Blomfield, Professor Lethaby, Mr. Mervyn Macartney, and Mr. Halsey Ricardo. These proposals set forth the proposition that neither the system of articled pupilage, nor the training in polytechnics and art schools had proved satisfactory, and that a combination of the two systems was desirable; that architectural education at present suffers from want of organisation, and should be taken up by a representative body of architects—such as this Institute— which shall be accepted by the public and profession as authoritative. The proposals suggested a preliminary course of training in schools and workshops, and a subsequent course in the office of a practising architect, an endeavour being made to co-ordinate and bring into line existing institutions, by the adoption, in conjunction with these institutions, of a uniform system with a central body such as this Institute at the head.

This, omitting all details, which are, of course, important, gives a fair idea of the proposals, and, I believe, commended itself to the Council as not only a desirable proposal, but also an eminently practical one. The Council having ascertained that the authors of these proposals would be willing to assist the Institute in working them out, by appointing some of their number to act on a Committee, the Council have appointed an Education Committee; and amongst those outside the Institute who have accepted an invitation to join our deliberations are Sir Arthur Rücker, Principal of London University; Mr. T. G. Jackson, Treasurer of the Royal Academy; Mr. Sidney Webb, L.C.C.; Professor Perry, of the Board of Education; and Mr. Basil Champneys; while the authors of the draft proposals nominated Mr. Reginald Blomfield, Professor Lethaby, Mr. Halsey Ricardo, and Mr. Macartney.

This Committee has met and discussed the matter and, with the aid of a sub-committee, has drawn up and adopted a report which is now under the consideration of the Council, and I am not, therefore, in a position to bring it before you, though I hope to be able to do so early in the course of the present session. We are encouraged to hope that we may be enabled to obtain the co-operation of the various teaching bodies in London in the scheme, and in course of time to extend our operations to the chief cities of the kingdom. We also hope to constitute a Board of Architectural Education, bringing upon it distinguished men interested in the subject, whether members of the Institute or not, its main duties being those of an advisory board on the courses of architectural studies in the various schools and their examinations. As the scheme develops we hope to have the assistance of our Allied Societies, and to offer facilities to their members to participate in the advantages of these improved methods of education, and first and foremost we hope to unite in one great effort for the improvement of the education of our younger brethren and give them advantages we sorely miss ourselves.

I feel I must apologise for having detained you so long on purely technical points on such an occasion as this, leaving me, unfortunately, but little time to deal with architectural matters of more general interest.

The past year has seen some notable events in architectural history—the opening of Truro Cathedral, completed in the course of fifteen years, with the exception of its western towers; the selection of a design for the new cathedral of Liverpool; the opening up of a large portion of the Strand improvement by the London County Council, and the erection of an important building on a portion of its site; the adoption of a design by the same body for the new Vauxhall Bridge; and the selection of a design for the great university at Cardiff. Further progress has been made with the great Government buildings in Whitehall and elsewhere, including, it is understood, the purchase of the remainder of the Great George-street site; while the Government have completed their great post-office building at West Kensington.

A note of warning greatly affecting London has been sounded during the last few days by the advertising for sale, for building purposes, three of the principal squares in Kensington, which, if carried out, would greatly interfere with the amenities and healthfulness of the Royal borough; and if the same process were carried through London it is almost impossible to realise the havoc that would be wrought. Fancy Berkeley Square, Belgrave and Eton Squares, Bloomsbury and Gordon Squares, and many others, all covered with huge blocks of flats! This, of course, is not likely to happen at present; but as long as they are in private hands it might happen at any time. Gardens with the backs of houses looking upon them are not so vulnerable, as they are difficult of access, and the houses themselves have considerable rights over them. I was myself offered the freehold of one of these gardens as a free gift some years ago, the owner being anxious to be free of its management and maintenance. But these gardens, as I pointed out last year, do not give to London what the squares do—a sight of grass, trees, and sometimes flowers. True, they might be kept much better than they are, and be made much brighter than they are; but as they are we are grateful for them. It has been suggested that Parliament should obtain some control over these open spaces, which would not interfere with landlords' and frontagers' rights, beyond the disability of covering them with buildings; and we must earnestly hope that Parliament and the County Council will lay their heads together to this end.

It has been my good fortune to see Truro Cathedral since it was completed, and all who have done so will, I am sure, agree with me that the new nave is a noble addition to the building, and that, accepting the literal use of a previous style in which its designer was so thorough a master, the result is impressive and worthy of the great effort made by Cornishmen for its erection. The deflection of the main axis of the nave, some six feet, I believe, in a length of 300 feet, and mainly caused by the necessities of the site, lends, I cannot doubt, advantage to the general effect, both internally and externally. Externally one could wish the material had been entirely granite, but probably the cost of this would have been practically prohibitory.

Since last we met Liverpool has also decided upon a cathedral, designed on mediæval lines by a young man bearing an honoured name in the architectural world, whose success must be a matter of encouragement to young men, and demonstrates once again the immense opportunities opened to young architects of ability by the competition system. It does not come within my province at this stage to refer critically to the design; but I am sure you will join with me in wishing Mr. Gilbert Scott success in his great and responsible undertaking. The appointment of Mr. Bodley, one of the assessors, as joint architect with Mr. Scott to carry out the work is contrary to our "Suggestions," and must not be looked upon as a precedent. The circumstances were very exceptional. I understand it was done with the complete concurrence of Mr. Scott, and was only agreed to by Mr. Bodley after great pressure had been put upon him, and when it became evident that the award would otherwise be put aside.

The widening of London Bridge is in full progress, and the temporary covered footways on either side suggest what picturesque and welcome adjuncts they would be to our bridges. These, the most exposed portions of our roadways, cannot be crossed in wet and windy weather without great discomfort, which those covered ways would entirely obviate.

While on the subject of our streets, we may be permitted to wonder what is to be the end of the forest trees planted on the verge of so many of our footways, delightful when young, but now that they are up to the tops of our houses rather darkening and obstructing to the view of handsome buildings. The huge electric standards, also, now being planted down the centre of our streets, seem to require immediate attention, both as regards position, design, and the curious colour they are painted.

The visit of Mr. McKim last summer naturally brought into prominence American practice in matters connected with our art, and especially with the control exercised in America over public improvements, and he left in our library a book containing a report which deals with the improvement of Washington by laying it out on a large and comprehensive scale; I commend a study of this book to all interested—and what architect is not?—in the laying out and improvement of our great cities. This book recounts how a small body of experts were appointed to prepare and submit a general plan for the development of the entire park system of the district. This Committee, I understand, virtually put aside their large and profitable private work for nearly a year, and devoted their time and experience to the service of the nation, a sacrifice made without any pecuniary reward. The Committee consisted of two architects, Mr. Burnham and Mr. McKim, a leading sculptor, Mr. St. Gaudens, and Mr. Olmsted, whose name is identified with what is best in garden architecture in America. For the proceedings of this committee I must refer you to their report, merely stating here that a short tour to the principal capitals of Europe was made, and then a comprehensive plan for the laying out of Washington was produced and laid down on the noblest and grandest lines, fully illustrated by drawings and models. The committee describe the realisation of the scheme as a stupendous task, much greater than any one generation can hope to accomplish; but they add that the hearty and intelligent co-operation with which the plans have been received by the officers of the Government, the Committees of Congress, and the public generally, make it practically certain that the development of the national capital will be prosecuted on the lines proposed.

Since this was written I understand a large sum has been voted, which will enable a substantial start to be made.

Again, at our annual dinner I ventured to give some particulars of a Commission appointed under the Charter of New York, composed of experts, who also act without fee or advice, in all art matters in connexion with New York. This is carrying out to some extent the more complete system in existence in France, where the care of all public buildings in Paris is entrusted to (1) the Minister of Public Instruction and Fine Arts; (2) the Minister of Justice and Public Worship; (3) the Prefect of the Seine; and (4) the Prefect of Police. Each of these Ministers is advised by a Council, mainly formed of architects of distinction. The duties and constitution of these Councils are very fully set out in a book by our late secretary, William H. White, entitled "Architecture and Public Buildings," published in 1884, which contains a great deal of most interesting information on this subject. It is under this direction that Paris as we see it to-day has been produced, and the same system is followed all over France. As the author says: "None, having an understanding of these matters, can traverse Paris without feeling that the authority which initiates and controls the great works of architecture in that capital, is a real and competent authority, to which the State turns for guidance and on whose judgment the Parisians rely."

Every public building throughout France, great or small, has an architect attached to it, and, where necessary, an assistant architect, who, commencing in some humble capacity at the Council of Civil Buildings, in due time is admitted as assistant to this Board, or Council, which gives him right of presentation to a public building in course of construction, as subordinate to the architect who is carrying it out, spends his days on the works, and may rise, if he conducts himself well, to be assistant architect or joint architect to a building, and ultimately architect-in-chief. In course of time he is summoned to take the place of Councillor on one of the various Boards, and ultimately the Academy of Fine Arts, who educated him,

will hear of him again, and finally elect him to their body. Thus the State not only assists in providing an efficient system of architectural education, but also provides itself with an efficient body of trained architects to undertake its public buildings, all working on a well-defined tradition, and producing works of great excellence, which we cannot but admire. I do not propose to compare these systems with the course adopted in this country, partly because you are all well aware what that is, and also because I am afraid the comparison could hardly be in favour of this country. Not that I mean, for a moment, that the French system in its entirety would be suitable here; it tends no doubt to a loss of individuality, which would hardly be tolerated here, for though we talk a good deal of working on traditional lines, I am not sure whether we have yet learnt the lesson of sinking our own individuality sufficiently to do so.

I have mentioned these systems in force in France and America to draw attention once more as I ventured to do last year, to the pressing need there seems to be in Great Britain, and which I think most of us feel, for some authority to whom schemes of public improvements should be submitted, not necessarily for sanction, but for consultation and advice. The work could hardly be entrusted to any single individual, but there would surely be no difficulty in finding men of skill, taste, and authority enough, and with patriotism enough, to form such a Commission as that established in New York, and on the same terms, if asked to do so by His Majesty's Government.

And how enormously such a body would strengthen the hands of the authorities carrying out great works and the architects designing them; public confidence would be increased, and schemes would be executed which are now often either dropped altogether or carried through in a half-hearted way as a compromise—a method desirable no doubt in many concerns of life, but absolutely fatal where art is concerned. The essence of a work of art is its completeness, and there compromise can find no place. I do not mean necessarily high finish or elaboration, but the expression of a complete idea; take something away from it or add something incongruous to it and it is destroyed as a work of art, and though this is understood as regards painting and sculpture (for who would venture either to add to or take away from a fine picture?), it is in no way understood or recognised as regards buildings. A house is designed to stand on a broad terrace, the terrace is cut out and surprise expressed that the house does not look as was expected. A building is arranged with certain approaches which are entirely omitted, or in matters of detail the windows are divided with bars giving scale to a building, and these are cut out.

But I have wandered from my subject, viz., the need of some authority to whom to refer our public improvement schemes. A case in point has lately arisen on the question first raised by Mr. Hamo Thorneycroft, on the alignment of the eastern end of the Strand Improvement Scheme. All who have taken part in that controversy will acknowledge the great consideration shown by the London County Council in the matter, first, by putting up boards to show the various proposals; and, secondly, by inviting representatives of your Council to meet their Committee and discuss the matter on the spot, which we did with great advantage, I believe, to both sides. But now who is to decide on the merits of the various plans? Would not the deliberate opinion of an independent body carry great weight with the public, who I believe are willing enough to pay, if assured they will thereby get a good thing? Since these words were in print the County Council has decided, and we have been officially informed that in the opinion of the Council not one of the proposals made (including that, I presume, of their own adviser) offers sufficient advantages to justify the Council in incurring the great expense which would be involved in increasing the already adequate width (100 feet) of the portion of the thoroughfare in question; and so what appeared to many brought up to consider such matters a great opportunity is lost to London. The decision may be right or may be wrong. My point is, and I speak with all respect: Are we satisfied with the competency of the tribunal to decide so important a matter?

Then, again, the solution of the Vauxhall Bridge design, which dragged on for so long, and was so happily settled as soon as collaboration between engineer and architect was established, would have been still further greatly accelerated had there been some such commission to which the matter could have been referred.

Again, there is that most thorny question of the control of the great new street from Holborn to the Strand. The Committee of the London County Council paid us the compliment of consulting us in the early stages, while the laying out of the street was under consideration, and also with regard to obtaining designs, with every intention, we fully believe, of carrying the accepted one through; but nothing has been done, so far, and this, as we firmly believe, not from want of will on the part of the Committee and officials, but from want of power, which the strong opinion of a competent authority would have supplied.

Gentlemen, I venture to think the formation of such an authority should be advocated by this Institute, in conjunction with the public bodies concerned, and that finally something might be done to place this matter on a more satisfactory basis. The interest that architects naturally take in our cities, and London in particular, is my reason for bringing it forward. The public are singularly apathetic in the matter. We have so long preached to them the beauty of old work that they have apparently taken our view, and regard modern work with comparative indifference. They resent, and no doubt in many cases rightly, the least interference with ancient buildings, but treat with unconcern the vast modern changes now taking place in our cities. The study of the past, invaluable to the student, delightful for instruction, and refreshment to all of us, must not take the place—for us at least—of the all-absorbing present and future. Last century was spent by us in research and retrospection; let us now show the result of our studies, and spend this one in action and progress. Let us see that our buildings are beautiful, as beautiful as we can make them, and with a beauty that tells of our time; not original, perhaps, but at least distinctive; let us see that they meet the present complicated requirements, that they are well placed for sun and air, cheerful, wholesome, gladdening; that we put something of ourselves into them, in order that they may give out something to others, and let us remember how great a responsibility rests upon us architects in our work. Ruskin, addressing the Architectural Association, once said: "What a peculiar importance and responsibility are attached to your work when you consider its permanence and the multitudes to whom it is addressed. We frequently are led by wise people to consider what responsibility may sometimes attach to words which yet, the chance is, will be heard by few and forgotten as soon as heard. But none of *your* words will be heard by few and none will be forgotten for five or six hundred years, if you build well. You will talk to all who pass by; . . . all those little sympathies, those freaks of fancy, those jests in stone, will occupy mind after mind of utterly countless multitudes long after you are gone; you have not, like authors, to plead for a hearing or to fear oblivion. Do but build large enough and carve boldly enough, and all the world will hear you; they cannot choose but look."

Let us, then, resolve that we will go straight forward, adding our little something to the great story of our noble art.

> "Guests of the ages at to-morrow's door,
> Why shrink we? The long track behind us lies,
> The lamps gleam, and the music throbs before,
> Bidding us enter; and I count him wise
> Who loves so well man's noble memories;
> He needs must love man's nobler hopes yet more."

The Right Hon. Lord Windsor, P.C., First Commissioner of Works, in proposing a vote of thanks to the President for what was really a remarkable address, said he would like to say how deeply he appreciated the honour they had done him in nominating him as an Honorary Associate of the Institute. He was greatly honoured by this proposal. He would have hesitated very long before saying anything that evening had the President dealt with all the subjects of his address from a technical point of view. There were certain subjects dealt with which he (the speaker) would not think of expressing an opinion on, but there were other matters which did not affect the Institute of Architects alone; they affected everyone all over the country who had any share in the architectural work of the great towns and cities. One of the most important matters referred to by the President was as to the advantage, the importance, of having some recognised body of competent persons who could be referred to, and who could advise on the selection of designs for the great architectural buildings in this country. The President had given some instances of the proceedings in other countries, and he (the speaker) ventured to think that the instance of the United States was of very great practical importance. In the States they had started on these lines, and had proved that they need not apply to the Treasury for the expenditure of any money in obtaining the advice they seek—that the foremost artists and architects of the country gladly gave up their time and ability to help the State in this great work. He did not doubt for one moment that the artists of this country, who were foremost in all branches of art, would be found willing to take up this honourable work—and they had the President's assurance that this was so. Very few of them could doubt that London—he took London because it was the metropolis of the Kingdom—had suffered in the past, and suffered terribly, from the want of a broad view of the manner in which their chief architectural works should be designed in order to make the city a magnificent one. He would take a part of London which was directly under the jurisdiction of the Government, *i.e.*, Whitehall. They must all feel that if the design and the plan for dealing with Whitehall had, from the commencement of the rebuilding of the public offices there, been laid out on broad lines with a really fine scheme, that a most magnificent approach to the Houses of Parliament could have been made. The blame was not in any way due to the architects, but to those who had instructed them. The architects had built fine buildings, but they had been permitted to consider only the actual work upon which they were engaged. There was no particular reference to any existing buildings, and certainly no reference whatever to anything which might be designed in the future. But though they might have lost many great opportunities, it was never too late to mend, and he wished to express his absolute sympathy and concurrence with the words of the President when he hoped that some such body as he had indicated—some such advisory body of competent persons—should have their voice in the laying out on a large scale of the streets and buildings of London. He would go one step further. He had no right to say anything beyond expressing his own personal concurrence with the President's views, but he could say this, *i.e.*, if the views which the President had expressed were, as he believed they were, the opinion of the Council of the Institute, he would gladly undertake to lay them before His Majesty's Government, and whether it might be possible for anything to be done or not for some time, those views should be placed before the Government, and no time should be lost in having this expression of opinion fully considered. He might say a word or two about an important building with which he was intimately connected, *i.e.*, the new University College building for South Wales and Monmouthshire. He was glad to have an opportunity of saying that they were grateful to the four architects who had sent in designs, but the pity of it was that the authorities were only able to build a portion of one of the designs. What he felt when he looked at those designs was that they should all be erected. One had been selected, but at present there was money enough to build only a part of it. He trusted that the money would soon be forthcoming for a much larger portion, if not the whole. The President had made some reference to the trees which had been planted in the streets of London, which raised rather an important question to London people. What was to be the future of forest trees growing in the streets? It seemed to him that we were too much afraid of the pruning knife, and that trees in towns and cities should be made entirely subservient to the architectural lines. Forest trees with spreading branches were absolutely suitable in open parks and gardens, but they did not seem to be suitable as the surroundings of buildings. He knew there was the great difficulty to be faced in London, *i.e.*, the inevitable smoke. Hardly any other tree, although they might have grown well when planted some hundred years ago, would stand the London smoke like the plane tree, and that was not a good tree to deal with in pruning. Still, we had the plane tree, and we had to deal with it to make a beautiful green support to the architectural buildings which existed. He had seen an anxious letter in the newspapers that the

Office of Works and the Government were going to make a new road right across the Green Park, which, it was said, would destroy the whole beauty of the Park. So far as he knew there was no foundation whatever for that statement. Such a scheme would be a very important one, and it would not be carried out until it had been sufficiently considered by Parliament and the public generally. Such a thing would not be done in a haphazard way, and there was no intention to do anything of the kind—certainly no intention to do anything of that kind in connexion with the Queen's Memorial.

Mr. H. T. Hare, in seconding the vote of thanks, said that the address of the President of the Institute was always looked forward to with cheerful anticipation for a *résumé* of the events which had occurred during the past year. In the present instance, their President had the happy faculty of crystalising and expressing the thoughts which were in other minds as well as in his own, and expressing them in a manner which was concise, clear, and instructive. The ground covered by the address was considerable, and he did not propose to follow the whole of the points dealt with. The question of registration had been dealt with in a more exhaustive manner than had been the case in previous addresses, and the subject was one which had been, and would be for some time, a burning one amongst architects. He did not propose to follow the arguments which had been used against the Bill at present before Parliament, for that would not be the place or occasion; but there could be no doubt that the state of affairs which had given rise to the promulgation of such a Bill was a lamentable one, and though they might fail to sympathise with the proposed means of reform, one could not fail to have sympathy with the objects the promulgators of the Bill had in view. The most important point touched on in the address was as to the control of public buildings, for it was one of the largest questions which concerned them as members of the architectural profession, and it was one of the most serious questions in regard to the future improvement of London and large cities. It was very gratifying to all of them to have heard Lord Windsor's remarks, and especially his acceptance of the views expressed by the President. It was a matter of congratulation to the Institute, and to the country at large, that such a man as Lord Windsor, with large and sympathetic ideas, should be the first Commissioner of Works. That some control of design must and would be necessitated in the future—he hoped in the near future—must be evident to anyone who looked around, and who compared the state of this country with that of other countries on the Continent and in America. No one could fail, if they noticed the way in which public improvements were carried out in other countries, to have a certain amount of shame when they saw how such things were done in this country. The reason usually given for the small and mean way in which our public improvements were carried out was the need for economy, and the cheapest course was generally adopted. This was a most narrow-minded, and the worst, course to pursue. The scheme which was controlled by the largest idea and governed on the broadest lines was the one which in the long run would prove to be the most remunerative. He thought that this was sufficiently evident from the great schemes for improvement which had been carried out in Paris during the last generation or two. He believed that almost all those schemes had been remunerative in the narrowest monetary sense, and much more so in the general advantage they had been to the city. As President of the Architectural Association, he wished to make a few remarks arising out of the President's address. Mr. Webb was one of the most honoured of the past-Presidents of the Association, and it was highly gratifying to him, the present President of the Association, to hear the very sympathetic way in which Mr. Webb had referred to the work of the Association, and to what had been referred to as the great departure at present going on in the way of removing the premises of the Association to Great Tufton-street. The Institute and the Association had been for many years more or less in touch with one another, and the sympathy and support which the Association had received from the Institute had been gradually increasing. The association of the two bodies had become more and more intimate. For some years the Association had had the privilege of using that room for meetings, and they appreciated that greatly, and in the present removal, etc., they had had the advantage of the advice of the President and Council of the Institute, and all this had been crowned by a most generous donation to the Building Fund. The work the Association was carrying out was one which must appeal to all architects; it was the education of the next generation of architects. Everyone must have felt that the education of architects under the pupilage system was not all that could be desired, and much improvement was necessary. This the Association was endeavouring to deal with by a system of day school work preparatory to pupilage. The course had been in existence two years, and the result had been most gratifying. What it would lead to in the future it was impossible to say, but he looked forward to the time when this work would extend to something much larger. It might even supersede the system of pupilage; but that was looking too far ahead, and one had to go step by step. He believed the system in America was almost entirely a collegiate one. The step the Association had taken must be entirely for the good of the profession, and must command the sympathy and support of all interested in the arts.

Mr. Reginald Blomfield said he was honoured in being asked to say a few words that evening. He could not agree with Mr. Hare that the most important matter dealt with by the President in his exceedingly interesting address—admirable in every respect—was the control of public buildings, important as it was. The most important question before them was the education of the young architect. That was far more important. Architects who were carrying on their daily work felt that, though they did the best they could for architectural students, there was much more to be done than had been done so far. The President had sketched a general programme that was now before the Council, and in regard to which some men outside the ranks of the Institute had been glad to co-operate to the best of their ability. The present position of architectural education was far from satisfactory. The system of pupilage to which they were all accustomed had been going on for many years, and it had some excellent points, but half of it was wasted. A student, when he went into an office, did not know how to take advantage of his opportunities or how to proceed with his studies. He remembered when he went into his uncle's office, at the age of twenty-three, that his uncle was surprised that he did not know what a mitre was, but there was no reason why he should have known that. A student ought, when he entered an architect's office, to know what he had to learn. That was the point, and it was in that respect that a remedy had to be found. The idea was that the defects of the present system could be remedied by the introductory training to be obtained in a well-equipped school. In that respect the Architectural Association had done wonders. He was never a member of the Association, but he had the highest admiration for it. For years it had pursued its way, through good report and evil report, by its own resources, and it had done admirable work and was stronger than ever. It had taken fresh premises, and it was to be hoped that it would be the nucleus of a centre of training; but it was working on its own resources, and educational reformers would like to see it reinforced. The Association required more equipment than could ever be provided by an individual body working with such resources as the Association possessed. Its system of architectural education needed development and organisation to a point it had not yet reached. They would like to see the school system as at present administered by the Association carried to a further point, and supplemented by a complete system of training in what was roughly called the workshop but in modern technical training was called the laboratory. The laboratory was not a place for the manufacture of chemicals, but a place where a student could come into contact with the actual facts with which he would have to deal in after life. That was to say, when the student designed a building he would have some idea of what timber and stone were. Some students did not seem to know. There were not many opportunities of learning such things in the master's office, and the student failed to grasp the importance and meaning of things. Now, they wanted students to visualise the things he was brought into contact with. Again, the laboratory should give opportunities for research in construction. That was a point in the study of architecture which seemed to have been neglected since the days of Wren. There had been many excellent architects since the days of Wren, but he questioned whether they had studied construction scientifically, as they should. They had been too much occupied by the particular fashions of the times in which they lived. It was time to get out of this ruck, and though the programme before them was a large one, it was not revolutionary. The idea was to develop and co-ordinate the existing system, and the programme was one which should appeal to all architects. The senior members of the profession who were past masters of the art ought to put their shoulders to the wheel, and to members of the Institute he would particularly appeal. They had in their President a man of rare sagacity and tact, and he was more likely than anyone to lead to a successful issue the scheme he had referred to. He thought it was the duty of all architects to co-operate in the scheme and to give any programme put before them a candid and impartial hearing.

The vote of thanks having been heartily agreed to,

The President briefly replied. Thanks were due to the visitors that evening, and especially to Lord Windsor for the sympathetic way in which he had entered into his (Mr. Webb's) proposals. There were many painters and architects of distinction there that evening, and had there been time he would have asked some of them to have joined in the discussion.

The President announced that the next meeting will be held on November 16, when M. Homolle, Director of the French School at Athens, will read a paper on the Monuments of Ionian art at Delphi.

The meeting then terminated.

THE ORDER IN MODERN ARCHITECTURE.*

A very able American critic, Mr. Russell Sturgis, made a plea some time ago in *Scribner's Magazine* in favour of the Classic order for town hall designs. He said that while on the one side the architect might admire a new and original treatment of such a building, he could quite excuse a committee for wishing that the building should, to their eyes and those of the townsfolk, "look like a town hall." A columnar order might be illogical, it might be a mere following of example and tradition, but in modern times it had come to be traditionally associated with a town hall (a sentiment which must, I am sure, appeal to Birmingham people), and it was quite natural and pardonable, said Mr. Sturgis, that the clients should wish this tradition adhered to, and that they should not be put off with a town hall without an order, while the neighbouring towns rejoiced in columnar dignity. It should be added that in the United States the prejudice in favour of a classic order for a town hall or a Government building appears to be still as strong and as general as it was in England more than half a century back. Latterly, we have rather gravitated towards the picturesque town hall; but the recent French sympathies of the Americans in architecture have given almost a renewed impulse to their love of the classic order, and few important American designs of recent date are without it.

That is the popular view in regard to the Classic order. Except for churches, in which for the most part the popular mind, in this country at least, demands Gothic, and thinks that a church which is not Gothic "does not look like a church"—with this exception it will be found that the public connects the Classic order with the idea of serious architecture on a large scale, and especially for a public or official building. This, of course, is mere association and habit, for the dear public does not concern itself with reasons for its architectural taste. It is our business to apply thought and reason to the subject, and to consider how much truth, if any, is to be found in the popular idea, or to what better purpose it may be turned.

Some very clever and enthusiastic Englishmen of the younger generation, who believe in a totally new revival of architecture, regard the columnar order as Artemus Ward regarded the Red Indian, as "poison wherever met with." They declare that nothing but hunting down and killing it will leave any chance for

* A paper read before the Birmingham Architectural Association, on October 30, by Mr. H. Heathcote Statham, F.R.I.B.A.

a true and genuine modern architecture to grow and develop. The Classic order, in their eyes, is merely a conventional straight-jacket under which the free life and the art of modern architecture is stifled and killed. As far as I know, this sect is a purely insular one, having no votaries in any other country. Whether there is any truth in its tenets depends very much on what you want to make of architecture in the future—whether you wish it to be a mere building craft or a form of intellectual expression, a point which will be returned to at the close of this dissertation. It also depends on a secondary question—what value are we to attach to tradition in architecture? It can hardly be denied that the whole history of architecture down to the present day has been a history of tradition. Even the Renaissance in Italy and the Gothic revival in England, though they broke into the tradition of the moment, did so in order to hark back to an older tradition. To say that we are to break with tradition altogether, and start on a new career, owing nothing to our predecessors, is to propose something which at all events has never before been proposed or attempted in the history of architecture; and there is the question, not only whether it is wise to attempt, but whether it is even possible to the human mind to carry out, such a programme; or perhaps one might say, such a negation of programme.

The mere imitative adoption of one of the orders, Greek or Vitruvian, as part of the exterior expression of a building, is no doubt a very academical way of treating architectural design; there is no life in that. But the general form of column and capital, which is the most important element in the order, has almost become an inevitable part of architecture. The upright stem or shaft, with some kind of decorative treatment at its apex, is found in the very earliest architecture that we know of. Had it not gone further than Egypt, we might have escaped it, for the Egyptian column, in any of its forms, has no convincing æsthetic completeness. It was the Greek who imposed it on the world, by fashioning it to such perfection; the Roman who distributed it, a little spoiled of its refinement, but still not materially altered, over a great part of the face of the earth. It may be said to have become an integral part of architectural expression. The gothic shaft and cap is only another form of the same thing. We can hardly think of a feature for carrying vertical weight, but in some form of the column and capital. Those who want a variation may try the Mycenæan and Cretan form of column, enlarging upwards instead of diminishing, with which Mr. Evans's discoveries at Knossos have recently familiarised us; but I do not think the result would be very happy, except on a small scale, and as a decorative feature. In that sense there is, of course, something like it in Elizabethan architecture.

The more debateable ground in regard to the classic order is that its main forms have become so rooted in our minds that they have been largely used in architecture as a means of expression on the face of the wall, in the shape of pilasters and half columns, crowned with the face form of the entablature, when the whole is constructively but a wall, and there is no question of weight-carrying columns bridged over by architraves. Many architects and critics of the modern-mediæval school have poured vials of contempt upon this practice; and as to many instances with reason. When pilasters or half columns are spaced along a front in a mechanical matter, merely because the architect wanted to put something, and did not know what else to put, that is a poor and superficial way of designing, and it may be added that it is found in just as crude a form in some buildings of the Italian Renaissance as in any modern work; one has only to recall the Rucellai Palace at Florence, with its mechanically-repeated pilasters in each story. It depends on whether or not it is done with a distinct aim at a certain expression and balance of design. Those who think that this mural use of the order is only a special vice of Renaissance and of modern architecture may be reminded that the Greeks themselves employed it in their best period on one face of the Erechtheion, in order to harmonise that portion of the building with the adjacent portico; and also, to the eye, in that little gem of Greek architecture, the Monument of Lysicrates; though it is curious that in this case the apparent half columns are worked completely in the round, the wall masonry being carried round them with a semi-circular joint, a construction which seems so unmasonic as to suggest a doubt whether the colonnade was not originally designed as an open one, and built in as an after-thought. It is true that the columns are only fluted on the outer half, but on the large temples we know that the fluting was done after the columns were *in situ*, and it may have been so here also. At all events, we see that the Greeks did not despise the wall colonnade as a means of expression, and those who consider that Gothic at least is clear of this kind of face design must have forgotten the numerous wall arcades, which are just the same kind of resource in another form, and also the fact that the shafts in arcade piers are in many cases merely a means of expression, and that the cap and arch-mouldings over them would stand independently of the shafts; so that it is hardly fair to visit this sin, if it be one, solely on the heads of Renaissance and modern architects.

We may consider the classic order in three different lights: In its structural employment by the Greeks, and to a certain extent by the Romans; in its decorative use by Renaissance and modern architects; and in its possible further modification in modern use. In the Greek colonnaded temples the order was the expression of actual structure; the colonnade and entablature were, practically, the architecture, as far as the exterior was concerned; the cella was screened away behind them, and hardly affected the design except as a kind of background; the columns were real weight-bearing features, carrying a superstructure which really depended on them for its stability. The æsthetic problem, considered as a whole, was therefore a very simple one. It was only the expression of the simplest of structures, a block laid from one support to another, with no lateral pressure. Its complication and refinement lay in the design and the variation of the details. In this respect it presents the most refined and intellectual form of architectural design in existence, that in which every detail is designed and proportioned in relation to the whole. This is what renders the study of the orders—the Greek ones especially—so valuable in an educational sense. It fosters, as I think no other study does, the perception of proportion and scale in architectural design. It is for this reason that we—rightly—set beginners in architecture to draw and study the orders, and that the French Ecole (which perhaps carries it a little too far) exacts a most intimate and learned knowledge of them; and it is because engineers (in this country) do not go through any such training that they mostly have not a notion what "scale" in architecture means. Whether this is any reason for reproducing the order in structural form in modern buildings, or whether there are any occasions on which it is suitable to do so, is a point we will recur to afterwards.

The essential difference between the way in which the orders were used in the structural columnar buildings of the Greeks and their use by the Renaissance and in many cases by the Roman architects, was never better indicated than in an expression used by Mr. Lethaby in a notable lecture which he delivered in London some years ago. Speaking of Wren, he said: "It was Wren's peculiar merit that he saw exactly what could be done with the Renaissance box of bricks." Mr. Lethaby is one of the reactionary spirits, who want to hunt down the orders, and precedent, and tradition, and all that, and I do not agree with his views; but he certainly has a way of putting things, and I do not think I ever heard a neater critical generalisation than that as to a great deal of Renaissance work, and much of Wren's in particular. The Renaissance architects took the whole thing to pieces, and put the pieces together again as their fancy suggested. Much of it was charming, but when you come to think of it the resemblance to the child's box of bricks is undeniable. Look at Wren's various steeples, for instance—many of them admirable in outline and character; but how much they suggest the work of a builder who has so many columns of one size, so many a little smaller, so many finials in the shape of vases, etc., to play with, and proceeds to fit them together in the most elegant and effective manner. Take some of the characteristic buildings of the Italian Renaissance, and see what an impression they give of pieces of different sizes and shapes put together to make a design.

The manner in which the order was used on the majority of the Roman triumphal arches gives, one must admit, the excuse of bad example to the Renaissance architects. For in these the column was planted on in front of the main plane of the erection, in such a manner that its whole function as a supporter of the entablature was gone, and the entablature had to be broken out and brought forward above the column in order to give the column something to do. After that, there came the problem of giving the entablature something to do, since there was a large square space left on the top of it which was useless. So, then, to bring this into use, a statue was put on the space; but the bulk of the entablature was far too great for the statue, and the column far too massive a feature to be reasonably required for supporting it, so that we have the absurdity of a very large architectural feature constructed in order to carry something quite disproportionately small and light. The Renaissance architects did not, indeed, erect triumphal arches on this model, though they imitated the fallacy of breaking the entablature; but the ill-effect of the example was manifest when France tried to become Roman under Napoleon, when Percier and Fontaine erected the triumphal arch of the Carrousel as a kind of free copy of the arch of Septimius Severus, and you see there the absurd effect of these small statues acting as finials over the columns and entablature. But apart from triumphal arches, which are seldom erected now (because they are useless and built only for beauty, and we are not so silly in these days as to build anything purely for beauty)—apart from this, the trick of breaking the entablature over the column, first practised by the Romans, has been the parent of a whole host of absurdities in modern treatment of Classic materials. The greatest absurdity of all, of course, is when columns are used to carry an arcade, interposing a square block of entablature between the capital and the springing of the arch; an absurdity of which Wren and his compeers and immediate successors became so sadly enamoured, quite overlooking the fact that the arch in such a case takes the place of the entablature, and that to introduce both is to mingle two opposite principles of structure. We have pretty well got it into our heads now that this is a mistake, and I believe it is no longer practised—at least, I do not remember any recent instances. But apart from the arcade, every instance of treating the entablature, even on the face of a building, by breaking it out over the capital, is essentially an absurdity, since it contradicts the very meaning and origin of the entablature, which was a horizontal mass resting on the tops of the columns; and here, just where it ought to bed upon the capital, and to break joint over the centre line of the column, you introduce a projecting mass which destroys all the meaning of the structural relation between column and entablature, and gives the impression that the architrave line is discontinued just where it ought not to be. I am quite aware that this is done in many otherwise good modern buildings by good architects; I am aware that it is done in Inigo Jones's banqueting-house. But I maintain that it is an essential absurdity, and that a man who cannot make the materials of the order serve his purpose without such misuse of them, had better let them alone. The Romans themselves set a better example in some of their triumphal arches. If you compare the Carrousel arch with the arch of Trajan, it is obvious how much more truly architectural is the treatment here, where, instead of merely breaking the entablature in a slice over the columns, the whole centre portion is brought forward, and the entablature retains its proper meaning and appearance as a horizontal block resting on the columns and on the central console. While we are on the subject of arches of this kind, it is worth noticing the new and original treatment given to the Roman idea in the arch designed by Blondel, in 1672, as the Porte St. Denis, at Paris. Here, to all appearance, the order is discarded, but it is not exactly so in reality. The traditional features of architrave, frieze, and cornice, are retained as the crown of the structure, the mass of wall itself taking the place of the ornamental column; and instead of the column, enrichment is obtained by a perfectly suitable feature, the sculptured bas-relief of trophies, which does not, like the columns of the Romans, pretend to be a structural feature, but is purely and frankly decorative. The design of this arch is a very good example of modern application of Classic materials, and it has had a good deal of influence on modern French architecture, the

idea of the bas-relief pyramid or stele, with its sculpture, being a favourite one with the Ecole des Beaux Arts school of architects.

The use of the classic cornice without the column, and with the wall taking the place and the proportion of the column, is one form of the adaptation of the classic order to modern use, which, illustrated in such buildings as the Farnese Palace, was imitated by Barry in the Reform Club, and by others in similar buildings. The idea was illustrated in buildings which, like the Riccardi and Strozzi Palaces, though they belong by date to the early Renaissance, are far more mediæval than Renaissance in feeling. And there is one of the best known structures in the world, the castle of St. Angelo, which is a curious illustration of this treatment being forced by mediæval hands upon what was once a classic structure, for there can be no doubt that what Hadrian originally built there was a Tholos—a circular building with a columnar order round it, which was cased up in mediæval times, to transform it into a castle, the machicolation probably occupying the line of the original cornice. Byron, who, of course, knew nothing of architecture, accused Hadrian of having erected a mass of masonry as featureless as the pyramids, in a kind of imitation of them.

"Imperial mimic of old Egypt's piles,
Colossal copyist of deformity"

he called him—quite inexcusably. It was probably a beautiful piece of classic architecture originally.

But this is a digression. To come back to the early Renaissance, buildings like the Strozzi and Riccardi Palaces preach eloquently of one thing—the power and grandeur of a great massive cornice. Our classic cornices of to-day are mostly such feeble things. According to a large-scale measured section in the Institute of Architects' library, the Strozzi cornice actually projects more than nine feet from the wall face. The projection is, of course, a great deal more than the thickness of the wall. When you see it in section, this looks rather alarming, even un-architectural. How it is rendered secure I do not know, but as it has remained *in statu quo* for over five centuries we may say that it is secure. I do not approve, however, of a cornice projecting more than the thickness of the wall, but here is where building by contract comes in. Contract walls run thin. But our modern cornices are feeble concerns in comparison. Even if we wish to make them bold and gigantic, a paternal building Act steps in. According to the London Building Act, "no cornice shall project more than 2 ft. 6 in. over the public way." When we were discussing the London Building Act at the Institute in 1894, I prepared a little diagram for edification on this point, showing the actual section of the Strozzi cornice, and the section it would assume under the "2 ft. 6 in. projection rule" of the London Building Act. The contrast was admitted to be instructive, though the argument had no practical result. However, the lesson is to try bold and large effects, and not be too timid. And in respect of the cornice there is this alternative: if we cannot project so much as we would wish, we may try depth and richness, instead of great projection, adopting a different kind of outline in our cornice. I have no example to give, but I think something might be done in this way to get beyond the small and feeble effect of our modern cornices.

From cases in which the whole wall represents the columnar proportion of the order it is a natural step to those in which the order is used in the whole height of the building. There are two ways of introducing the order: To proportion it to the whole building, or to employ small orders in different stories. The difficulty with the former almost always is, in modern buildings, that we have to divide the interspaces into more than one story. Then the critic of perfection says, this is an architectural falsity—a sham. Well, that depends a little on how it is done. San Gallo made a model for St. Peter's in the storied-order fashion, small orders one over the other. When Michelangelo was looking at it with someone else, he said, "Ah! you will find plenty of pasture there," and he was supposed to mean a compliment. But when he was twitted about this afterwards, he replied, "When I said pasture I meant for ox-headed people." He wanted a big order, and carried it out at St. Peter's. He has been blamed for this as reducing the scale of the building by his gigantic order. But I am not sure that the fault lies exactly there. The scale of St. Peter's is reduced internally by having too few and too large bays, so that the eye does not get a measure of the length, and the exterior mistake is in the two stories of comparatively small windows to a building which was one great cell. In short, the mistake is not in the columns so much as in what is between them. A colossal colonnade is a grand object. Just look at those stupendous fragments of the Temple of Diana, in the British Museum, which almost overawe one: "There were giants in the earth in those days." What must have been the effect of that entrance portico when complete? The Ephesians might well have been irritated with St. Paul for not appreciating it. Take the interior of the Pantheon, one of the grandest buildings in the world, in spite of its defects. Would it not have been still grander if, instead of this wall broken up into two stories, and the small columns here and there as framework to niches, there had been one great order filling the whole height to the springing of the dome, with a cornice in proportion? In the Pantheon at Paris—a far less grand interior no doubt—Soufflot recognised this, and carried the dome and the barrel vaults on one large order, and a noble interior it makes. I always try to make time for a few minutes in it when in Paris, just as a sort of refreshment. It is so spacious, so calm, such a unity about it. And here the entablature is turned to its proper account as a lintel on which to base the vaults, while leaving an open colonnade below. It is used in somewhat the same principle in Assisi Cathedral, where the entablature goes over the small arches and forms the impost to the larger ones. The Medici Chapel, at Florence, is a simpler example, in which the piers supporting the arch are not so much pilasters as a projecting portion of the wall, taking the place of the column. Neither of these, however, are at all equal to the Paris Pantheon in grace and finish of architectural treatment, taking the architectural design as a whole.

The foregoing are cases in which the height of the order really represents the height of the main division of the building, from floor to impost. They are in no sense illogical. The question is different when we come to the employment of a large order on the exterior of a building when the building itself is in two or more stories. The question of more than two stories, however, may be neglected, for two vertical stories between the order may be taken to be the utmost that can be allowed, admitting that it is justifiable to employ a large order at all as a face decoration. Is it admissible? The only defence of it lies in the fact, on which some stress has already purposely been laid, that the column and entablature, and the column especially, have become such a part of the architectural thought and habit of mankind, so interwoven with our associations of architectural dignity, that we use the form to impart to a block of building an architectural dignity and expression which the mere wall with openings in it would not have. It may be done well or it may be done ill. Take the older wing of the Louvre designed by Du Cerceau. There we have a great set of pilasters which are designed and spaced so as to divide the façade into a set of compartments, alternately treated with a different finish. Fergusson, while giving it as an example of the period, speaks of it with an angry contempt which I do not think is at all justified. I think he is right in one point—that it was a mistake to push the upper windows through the architrave; a treatment which gives it a more conventional appearance than it would otherwise have had. The pilasters are not constructional, but they are traditional, and impart a traditional dignity; and the manner in which they are grouped seems to me to remove this from the mere "box of bricks" treatment; there is a certain thought and consideration about it. It is not logical; but art does not live by logic alone, and I confess that to me it seems a fine and dignified facade, to which the order imparts a largeness and breadth which it would not otherwise have had. I think it would have acquired more consistency and effect, however, if the windows in the centre of each group had been treated differently from those between the groups. The design, however, shows that it is possible to treat two stories of windows between an order, without bad effect, only they must be distinctly in a different architectural plane from the order. When you come to more than two tiers of windows, the discrepancy becomes too great between the scale of the order and the scale of the windows.

Greenwich Hospital is an example of a long low façade which gains very much in effect from the river by the introduction of the columns; you can see how heavy it would look if they were removed; though, with deference to the shade of Wren, I think it would have looked still better had the order been rather higher and the attic smaller. The so-called attic is often the most conventional and least admirable feature of modern classic buildings. Otherwise, this façade shows that the introduction of the order is a means of architectural effect and of supplying the element of contrast. You may gain in æsthetic propriety by removing it, but you lose in picturesque effect. Which is worth most? That is one of the questions I will propose to you. There is a more modern English building which is really a one-story one, in which the order is used as a means of expression and contrast with almost absolute propriety; I mean the Bank of England. This was a building which was to be enclosed like a fortress in its outer walls, with no window openings in them. To relieve the monotony of the blank wall, portions of it are set back and decorated with a colonnade, thus importing the traditional architectural element into it. It certainly looks well. We might no doubt have said to Soane—"Why not design a column of your own, instead of taking an order ready made?" There, again, you have the question—Do you gain more than you lose by originality, supposing you to adopt the columnar form at all? On one side is a new interest, on the other side the dignity and association of tradition. Which is best? Another question for you.

The Parliament Houses of Berlin is an example of a building in which the order has been used on a large scale in a manner which is worth note. The angle pavilion, with its immense useless attic, is very bad; but there is something in the way the columns are introduced in the lower portion of the façade which seems to connect them more intimately than usual with the design. They are half-round columns, and, with the masonry joints running through them and the string course dying into them, they have not the look of being planted on which we so often see. They get away from the "box of bricks" idea; they are half-round projections assuming the treatment of an order. Now, if you want to relieve the surface and give more expression to a wall, it is possible to carry that idea further; to have projections which, without being exactly columns, are treated somewhat on the same principle, with a decorative finish at the top, taking the place of the capital and yet not a capital. I tried that once in a competition design, and succeeded, at all events, in puzzling my critic. The competition was reviewed for the *Builder* by a man who was not allowed to know that the editor was in it. He mentioned the style of most of the designs, but when he came to my own he wrote, "We are utterly at a loss to specify the style of this very original design." That was what he said, at any rate, and whether the originality was true or not, it was at all events a satisfaction to feel that one had evaded being labelled and pigeon-holed. I would suggest that there is a path open in that direction—details suggested by the Classic order, but used or introduced in a different fashion. Only, do not go into competitions with that element. Competition committees and assessors cling to orthodox design. It is safer.

The modern employment of a great columnar order absolutely free, that is to say, really carrying the superstructure as in a Greek peristylar temple, is at all events not open to the charge of the applied order, of being a mere piece of decoration; and if well carried out it looks as fine now as it did twenty-four centuries ago. But there are few modern occasions in which it is practically suitable. The Paris Bourse, perhaps, may be considered one of them, for in an Exchange where a great deal of business is done in a peripatetic manner the open colonnade may have a real and very agreeable utility in fine weather. I see no reason why the Madeleine might not have been an equal success. I do not see why the columned temple may not be perfectly suited for a modern Christian place of worship, with a grand effect both externally and internally. But the Madeleine is ruined by a gimcrack interior quite out of keeping with the exterior; and, of course, it may be admitted that the exterior is too merely imitative. The same may be said of your own town hall, which, nevertheless, I cannot help admiring as an architectural spectacle, though I am afraid that,

like St. George's Hall at Liverpool, it illustrates the fact that the columned temple form of building does not lend itself well to the requirements of convenience of planning for a public building. There is another celebrated building in which the exterior colonnades have been severely criticised as being merely an empty show and a loss of space, viz., the British Museum. A loss of space they certainly are in a sense; yet one cannot help thinking that, at the time the building was erected, it was rather a fine thought of the founders of the Museum that they should spare no expense to have a dignified frontispiece to what they evidently foresaw was to be a great institution. The question is of practical import at the present moment, as new ground has been purchased on the north side, and the Museum is eventually to be more than doubled in extent, and the plan at present proposed is to repeat the southern façade, colonnades and all, towards the north, for the sake of architectural grandeur and unity. I received a letter from a distinguished amateur a few days ago, asking me to join in opposing this, as an architectural mistake in the practical sense. On the other hand, an eminent painter of architectural subjects, who for several years lived in chambers opposite to the British Museum, told me that those colonnades "were a daily joy to him." That is certainly a point of view to be considered, as well as that of architectural unity. Which view is right? I can hardly make up my mind; I shall be obliged if you can help me.

When smaller orders are introduced, each confined to one story, the true sense of their introduction is to use them so as to produce emphasis at special points, not to repeat them mechanically all over the surface. The one good point in the exterior of the Versailles Palace, the one thing that strikes you besides its size, is the emphasis given to the two wings that project into the vast expanse of uneven paving, like two headlands into the sea, by the boldly treated colonnade and pediment at the end of each. In such a front as that of Saint Sulpice, at Paris, we see the mistake of want of concentration of the order. The colonnades in the centre portion, where there is a void and where the columns are really acting as supports, would have far more effect if the side towers were left plain in contrast, instead of having a face order planted on them. On the other hand, Gabriel's fine façade at the top of the Place de la Concorde, with its rusticated arched ground story and the order above forming the loggia, is a really charming example of the true architectural use of a colonnade for expression and contrast.

One exceptional building with storied orders is the Luxembourg—exceptional in this way, that while each story contains its engaged columns one over the other, the hardness and littleness which might have resulted from this is quite carried off by the varied treatment of the rustication which is carried all over the building, and gives a remarkable breadth of effect to what would otherwise be a rather tame design. Fergusson, in one of his captious criticisms, complains of this rustication; but the fact is, it is just the rustication which saves the building, giving it texture and the look of masonry instead of cabinet-work.

Baltard's fine church of St. Augustine, in the Boulevard Malesherbes, is one I would draw attention to in reference to the clever and effective treatment of the internal order. The church stands at the junction of two streets at an acute angle, and the outer walls follow the line of the streets, the plan expanding as you approach the choir. There is a colonnade on each side of the nave, which commences with an engaged pilaster on the wall; then another a little more projecting; then they get free of the wall and form an open colonnade, the outer aisle walls slanting away in the rear of it. It is a fine, and as far as I remember, a unique interior effect.

If it be admitted, as already suggested, that we cannot well get away from the columnar order in architecture—that it is a form which has imprinted itself on the human mind as an element of architectural conception—is it not possible to put new life into it by variations of treatment in detail? The decorative capital seems in the first place to afford an opportunity for this; an opportunity surely much neglected. The late Mr. Richard Hunt, the eminent American architect, on seeing a student attempting a variation on the Corinthian capital, said, "Do you think you can make a better capital than the Jupiter Stator?" and on being answered in the negative, said, "Then why not stick to it?" or words to that effect; and this is very much the feeling of the French school and of the Americans who follow its lead. Practically, it seems to be the feeling also in England. We see accepted forms of Classic capital imitated over and over again in every detail; just taken out of the books. I one day received an indignant letter to tell me that the late Mr. Ewan Christian, in carrying out the National Portrait Gallery, which forms architecturally part of the National Gallery, was not properly imitating the capitals in the older portion of the building, but carrying out a variation on them, and asking me to protest. I replied that he showed his sense in striving after a little individuality of detail in his own portion of the building. But the attempt is hardly ever made. That it is not made is to a great extent sheer indolence. It is much less trouble to take a ready-made form. But a foliage capital is just the kind of thing in which some new studies might be made. The conventionalised acanthus has not surely exhausted the possibilities of decorative foliage of a Classic type. I should like to see a prize offered for the best study of an original capital of the Corinthian capital type. Perhaps I may offer one myself one of these days.

We have not been without instances of attempts to vary the treatment of the order as a whole. One remarkable one was made many years ago by Elmes in St. George's Hall, where the square columns with the panelled screens between them are a translation of late Egyptian architecture into Greek form. That was a totally new idea in modern classic architecture. A recent fashion has been the employment of little colonettes, with a greatly exaggerated entasis. I do not think that is a very beautiful or a very sensible addition to the field of classic architecture; it is a fashion of the moment, and likely to go out again. Mr. Belcher, an architect who is striving after originality and picturesque effect, on classic lines, has made some not unsuccessful experiments with the order. One is that, in an applied form, he chooses to use it without adhering literally to the accepted proportions, as in his competition design for the South Kensington Museum, where the applied pilasters are used in a somewhat lengthened out proportion, to give an effect of verticality while preserving the horizontal character of the building as a whole. A perhaps more interesting experiment is that which he made in that very original building, the Institute of Chartered Accountants, where an order is used in the upper part of the building, with a crowning feature which represents the architrave and cornice of the classic entablature, but with the frieze omitted. This was perhaps done with the object of keeping the crowning of the facade more in proportion with the columns, for it is a difficulty which always occurs when you use a one-story order at the top of a building, that you are liable to find the entablature either too light in proportion for the whole building, or too heavy for the columns. Therefore, as a general rule, if a small order is used in the upper story (a rather favourite incident in our modern free classic buildings), it is better to treat it as separated from the main cornice a little, instead of being immediately connected with it, so that the eye refers the cornice to the whole building, and not to the upper colonnade merely. In the Chartered Accountant's this is not the case; the cornice is more referable to the order than to the building as a whole; but at any rate the architect has shown that you may exercise some liberty with the classic entablature, and leave out the frieze if you do not want it.

Among the methods of using pilasters as a means of diversifying the face of a building, there is one which is always to be condemned—viz., the trick of building out pilasters on corbels, when they cannot be carried up from the base of the building. That is the last resource of bad designing. There is precedent for that, too; but it is a bad precedent.

As an example of the variations which may be made in the treatment of the column, I may refer to the interior of Mr. Skipworth's fine and original study for the Liverpool Cathedral, published in the *Builder* of October 24th, where the column on the face of each pier is treated near the top with a delicately-indicated spiral line, formed of fillets which appear to develop out of the surface of the columns. The main feeling and tendency of the whole design, it is true, is Gothic; but the incident could equally be introduced in a classic column. I only mention it as one suggestion that variations are possible, and that our columns need not all be cast in the same mould.

The form of heavily spiralised column, as if the whole thing had been twisted by machinery, found in examples of *rococo* Renaissance, is only suitable on a small scale, for a shaft or baluster rather than a column. On a large scale it is a monstrosity. Scale is an element in all these things.

Referring to what was said before, as to the educational value of the Classic order, and the reasons for it, brings us round to consider the application of that to the possible ideal of modern architecture. Greek buildings, and a good many both Roman and Renaissance buildings, have the effect of being complete architectural ideas, in which every detail is considered and nothing is left to chance or what is called happy accident; they are conceptions complete in themselves. We see few such buildings in the present day; partly perhaps because the hurry of modern life and its demand for every building being finished quickly leave no time for this careful evolution of design. But that is the true architectural ideal. Architecture, in its highest sense, is not mere craftsman's work, or the production of buildings which are called picturesque because they have the appearance of having been thrown together by accident; an appearance which is picturesque in an old building that was really added to at different times, but which, when it is done consciously, loses its charm, and is in fact as conventional a thing as any employment of the orders. Architecture is a form of intellectual expression, and has been most completely so in the best productions in which the Classic order was associated. We do not want to copy the orders, but we may very well take them as a basis to work upon in the endeavour to produce something as perfect as those who first evolved them produced. As an example on a small scale take the pylon of the new bridge at Paris. That is not a copy of anything; it is an employment of Classic materials in a new combination and with the greatest refinement of line and detail. I call a thing like that really a work of art. I suggest that a great building (if one's clients would only give one time) may be equally so; and that the Classic order affords both an example of perfection, and also furnishes materials for intelligent though not blind and imitative use, to the same end.

THE LONDON COUNTY COUNCIL.

The usual weekly meeting of this Council was held on Tuesday afternoon in the County Hall, Spring Gardens, Lord Monkswell, Chairman, presiding.

Loans.—On the recommendation of the Finance Committee, it was agreed to lend the School Board for London 200,000*l.* for new schools, etc.; Deptford Borough Council, 5,338*l.* for paving works, etc.; Shoreditch Borough Council, 1,710*l.* for brick and pipe sewer; and Holborn Guardians, 2,000*l.* for erection of casual wards, etc. Sanction was also given to the Council of the Royal Borough of Kensington to a loan of 27,098*l.* for erection of dust destructor.

Chief Officer of Tramways.—On the recommendation of the General Purposes Committee, Mr. A. L. Coventry Fell was appointed chief officer of tramways at a salary of 1,500*l.* a year.

Tenders.—The Highways Committee recommended:—

(*a*) That, subject to the result of the usual inquiries proving satisfactory, the tender of Messrs. John Musgrave and Sons, Ltd., be accepted for the supply and erection, for the sum of 96,713*l.*, of the four 5,000 h.-p. steam engines required for use at the electricity generating-station now being established at Greenwich, in connexion with the electrical working of the Council's tramways. . . . .

(*b*) That, in connexion with the supply of the engines referred to in the foregoing resolution, Messrs. John Musgrave and Sons, Ltd., be allowed to sublet the following portions of the work to the undermentioned firms or to such other firms as may be approved by the engineer under the contract, namely, (1) to Messrs. John Brown and Co., Sheffield, the manufacture of the heavy forgings; (2) to Messrs. J. Webb and Co., Bury, the manufacture of the light forgings; and (3) to Messrs. W. Jessop and Sons, Sheffield, the manufacture of the steel castings. . . .

This gave rise to some discussion, in the

course of which Mr. Torrance said he thought it was a dangerous thing to invite tenders and then not accept the lowest, and he considered the Council were entitled to a fuller explanation. To pass over the lowest tenders caused comment and gave rise to a good deal of disappointment.

Mr. Waterlow pointed out that it was necessary to be very careful in the purchase of machinery, and to a large extent they had to rely on the reputation of the maker.

Sir W. Collins considered that Mr. Waterlow's argument was one in favour of selected tenders as against open tenders.

Mr. Benn (Chairman of the Committee) read a Report on the matter from the responsible officer, the Electrical Engineer, who pointed out that two of the lower tenders were incomplete, and one not according to specification. The engines were the largest ever made for a municipality, and many points had to be considered. It was felt that the firms tendering below the one recommended had not sufficient experience or had not sufficient capacity in their workshops for carrying out the work satisfactorily.

The recommendation was carried.

Tramway Extension.—The same Committee brought up a Report dealing with the question of acquiring the undertaking of the South London Tramways Company. They pointed out that the tramway was 5¾ miles in length, and was not remunerative. If the Council took over the undertaking and electrified it, it would be necessary to make extensive street widenings, and the total capital sum which would have to be provided was estimated at over 450,000*l.* Having regard to the capital commitments of the Council, and to the fact that the Council could seven years hence acquire the undertaking, the Committee recommended that the powers in respect of purchase be not exercised at the present time.

Mr. Dolman moved that the recommendation be referred back for further consideration. He said the tramway in question carried 6,500,000 people yearly, and the deficit on the undertaking, if acquired, would only be 2,400*l.* the first year, and that deficiency would decrease yearly.

Mr. Dew seconded the amendment, which, after considerable discussion, was agreed to.

Housing and Fiscal Policy.—Mr. A. Smith asked if the Chairman of the Housing Committee could tell what effect any increased price of building material brought about by the imposition of tariffs would have upon the housing policy of the Council.

Earl Carrington said it was now difficult to make both ends meet with regard to the Council's housing schemes, and he would view with considerable apprehension any rise in the price of building material or labour.

Holborn to Strand.—The Improvements Committee brought up the following paragraph, the recommendation being agreed to:—

"By an agreement between the Council and the Duke of Bedford, scheduled to the London County Council (Improvements) Act, 1899, the Council is required to sell to His Grace certain surplus land in connexion with the Holborn to Strand improvement, having a frontage to the northern side of the western portion of Aldwych. The agreement further provides that with a view to maintaining a harmonious character in the elevation of all buildings which shall be erected fronting on Aldwych, the elevation of any buildings to be erected on the site to be conveyed to the Duke of Bedford shall be previously submitted to the Council for its approval, but that such approval shall not be unreasonably withheld. In accordance with this agreement plans have been submitted of the proposed elevation of a block of buildings, consisting of the Waldorf Hotel, with a theatre at either end, to be erected in Aldwych between Catherine-street and Drury-lane. Messrs. Mackenzie and Son, the architects for the Waldorf Hotel, and Mr. W. G. R. Sprague, the architect for the two theatres, have readily accepted various suggestions which have been made in order to secure greater harmony in the general treatment, and we consider that the design as now amended may be approved. We have arranged for the design and a perspective drawing to be placed in the Council chamber, and we recommend:—That the design submitted to the Improvements Committee on October 28, 1903, for the elevation of the Waldorf Hotel and two theatres adjoining proposed to be erected on the northern side of Aldwych between Catherine-street and Drury-lane on land to be conveyed by the Council to the Duke of Bedford, be approved."

Gardens in Squares.—It was reported by the Parks Committee that the Mercers' Company had agreed to lease to the Council York-square and Arbour-square, Stepney, for twenty-one years at the nominal rent of 5s. per year. The same Committee recommended:—"(*a*) That application be made in the next Session of Parliament to secure the continuance of the restrictions against, and prevent any building over, the garden of Edwardes-square, Kensington. (*b*) That it be referred back to the Parliamentary Committee to communicate with the owners of garden squares in London, and to advise the Council as to what Parliamentary powers are desirable for the preservation of such garden squares."

After discussion, the recommendations were adopted.

Land Auctions.—The Corporate Property Committee reported as follows:—

"We report that the valuer on 13th instant submitted to public auction several plots in Aldwych, and Kingsway; Southampton-row; Mare-street, Hackney; Long-lane, Bermondsey; Tower Bridge-road; and the Clarence-street artizans' site, Rotherhithe, with the result that lot 8, Southampton-row, lot 1, Long-lane, lot 13, Mare-street were disposed of, and that lot 12, Mare-street was let, as the result of negotiations in the room after the auction.

The Clarence-street, Rotherhithe, site, which was offered on a 999 years lease, failed to elicit a bid, and we have informed the Bridges Committee that we have been unable to dispose of the site.

The results of the usual inquiries which have been made as to the ability of the several intending lessees to carry out their obligations under their leases have been found satisfactory."

Mr. Howell J. Williams said he thought the conditions might be revised, and he could see no reason why the eighty years' period should not be altered to ninety or ninety-nine years.

Mr. Campbell said the Council ought to grant leases for periods of ninety-nine years.

Mr. Mullins, Chairman of the Committee, said a report would shortly be brought up dealing with the matter.

The Council soon after adjourned.

ENGINEERING SOCIETIES.

Society of Engineers.—At a meeting held at the Royal United Service Institution, Whitehall, on Monday, the 2nd inst., Mr. J. Patten Barber, President, in the chair, a paper was read on "The Bacterial Treatment of Sewage" by Mr. George Thudichum, F.I.C., F.C.S., and of which the following is an abstract:—The author prefaced his remarks by stating that the extensive experiments which had been carried out during the last seven or eight years by various authorities had yielded results very gratifying to those who had first introduced bacterial methods. The principle that sewage could, in the large majority of cases, be purified by biological means alone, had now found practically universal acceptance, that being endorsed by the Interim Report of the Royal Commission now sitting. He pointed out that, that being so, there was no longer any need to argue as to principle, but the best methods of application might still be discussed with advantage. The two main points which were still being argued were (1) the relative merits of the anaërobic or septic, as compared with the aërobic, or coarse-grain contact system; and (2) the various ways of applying the effluent from the preliminary treatment to the finishing filters. The author then proceeded to discuss the first point, and after setting out the arguments *pro* and *con* at some length he finally gave it as his opinion that the anaërobic process was more in accordance with the teachings of Nature, and, moreover, possessed certain specific advantages over its rival, such as the averaging of the sewage flow; the greater ease with which regular periodic working of the filters could be obtained; the absence of trouble from loss of water capacity through deposition of solids; and the easier and cheaper cleansing, if necessary. The necessity for covering a septic tank was then dealt with, the author stating that he thought it desirable, since it prevented disturbance of the bacterially-active scum, avoided risk of nuisance, and enabled use to be made of the gases evolved during the putrefactive process, as was actually done at Exeter. As regarded the question of the best method of applying the primary effluent to the secondary beds, the author hesitated to express an opinion, since excellent results had been obtained by either method, and the evidence available was not yet sufficient to enable a definite verdict to be arrived at. The author then discussed the question of sea outfalls, and the possibilities of pollution of shell-fish by sewage or sewage effluent. He thought that in some cases the standard demanded was too high, and suggested that reasonable safety was all that should be asked for, since absolute safety was practically unattainable. The author concluded by pointing out how the present methods of sewage treatment had been gradually built up, tracing the growth of the so-called Sutton system from its early commencement to its maturity.

ARCHITECTURAL SOCIETIES.

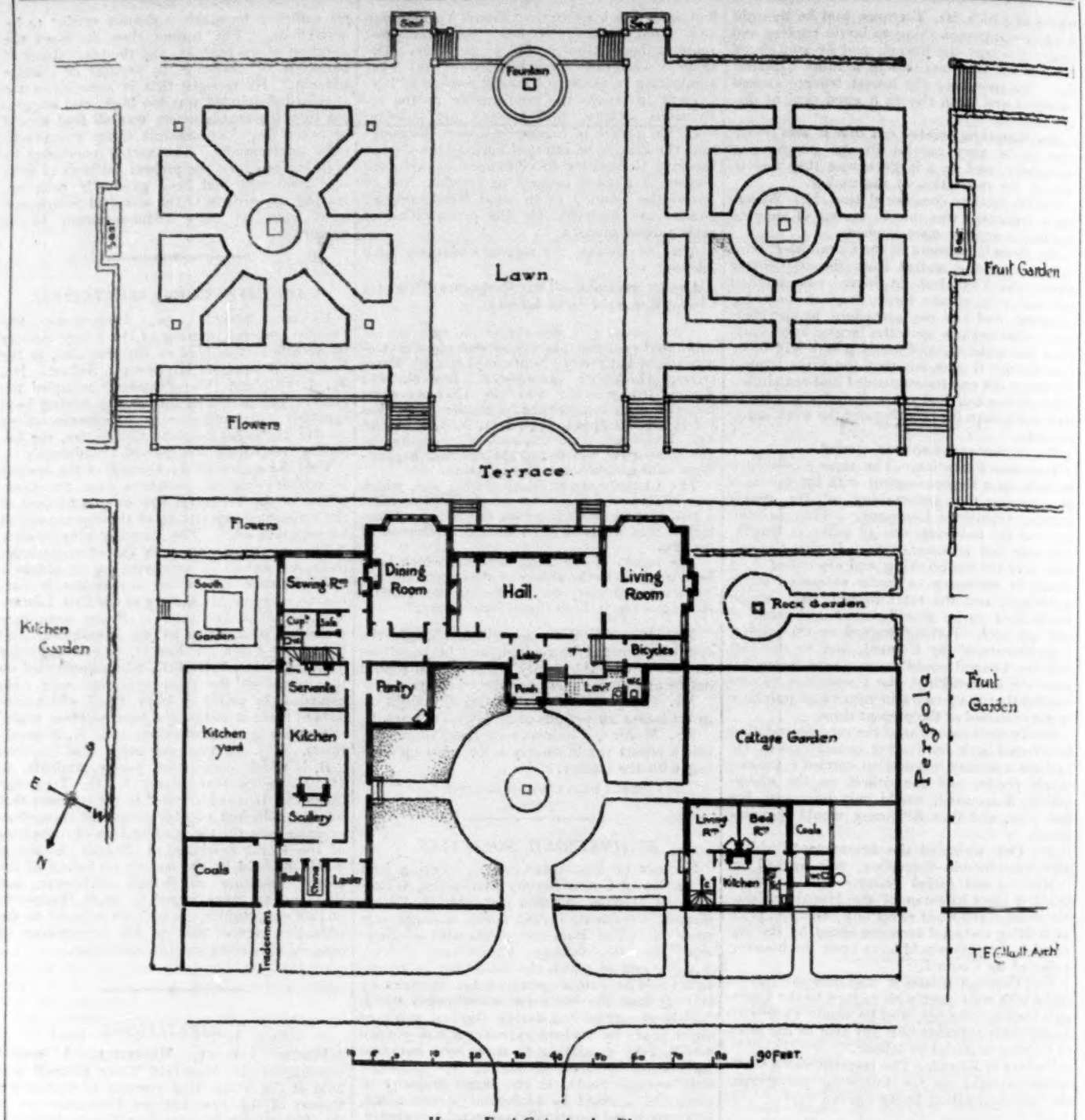
Ulster Society of Architects.—The October general meeting of the Ulster Society of Architects was held on the 26th ult., in the Society's Rooms, 16, High-street, Belfast. Mr. W. J. Gilliland (Vice-President) occupied the chair. The action of the Society having been reported with reference to its representatives on the Technical Institute Committee, the following resolution was passed unanimously:—"That the action of the Council of the Society in withdrawing its members from the Committee of the Technical Institute on account of the unsatisfactory nature of the representation be approved of." The meeting also decided, "That we co-operate with the other societies interested in art in endeavouring to obtain a representative expert art committee in connexion with the Art Gallery of the Free Library and Technical Institute." Prizes were then presented to students of the Designing and Sketching Club. A Report, prepared by Sir Thomas Drew, P.R.H.A., who adjudicated on the merits of the drawings, was read. He awarded the prizes in class "A," which consists of those students who have had four years' experience in the profession, to E. R. Kennedy (first), S. J. M'Avoy (second); and in class "B," which consists of junior students, to H. M. Scott (first), and E. G. Trobridge (second). It was intimated to the students that when a sufficient number presented themselves examinations for the qualification of Associates of the Royal Institute of British Architects would be held by the society on behalf of the Royal Institute of British Architects, and the students were urged to avail themselves of this opportunity, as well on account of the educative advantages as the importance of possessing a recognised qualification.

COMPETITIONS.

Public Library, Mansfield.—A special meeting of the Mansfield Town Council was held at the Town Hall recently to discuss the Report of the Free Library Committee as to the designs for the new free library building, towards the cost of which Mr. Andrew Carnegie has contributed the sum of 3,000*l.* The report of the assessor, Mr. A. E. Bromley, stated that he had thoroughly investigated the six sets of drawings sent in for competition, and was of opinion that, all things considered, the first premium should be awarded to Mr. E. R. Sutton, Nottingham, whose design was marked No. 1. The Committee recommended the adoption of the assessor's report, that design No. 1 be accepted, with the slight modification suggested by the assessor, and that design No. 3 (sent by Mr. Goodacre, Mansfield) be awarded the second premium. After discussion, it was decided to place the rooms at the Town Hall at the disposal of the Committee for the purpose of exhibiting the design.

Bromley Public Library.—The accepted design in the recent competition for Bromley Free Library is by Messrs. Squire, Myers, and Petch, 19, Pond-place, South Kensington. The second premium was divided by Mr. C. H. Norton, 14, Bedford-row, London, and Mr. A. F. M'G. Milligan, 17a, South Castle-street, Liverpool. There were fifty competitors. The building is to cost 7,500*l.*

Public Offices and Town Hall, Acton.—The Urban District Council of Acton at their meeting on the 3rd inst. decided to adopt the design of Mr. W. G. Hunt, architect, 17a, Vicarage-gate, Kensington, London, W., which had been awarded the first place in the competition by the assessor (Mr. J. Macvicar Anderson, F.R.I.B.A.) for the new Public Offices and Town Hall, Acton.



House, East Grinstead. Plan.

Illustrations.

HOUSE AT EAST GRINSTEAD.

THIS house was designed to be built in local stone walling and local stone dressings quarried on the estate; the covering to the roof being in Westmorland green slates, and the whole of the outside woodwork in English oak.

Mr. T. E. Collcutt is the architect.

CHURCH OF ST. MARY MAGDALENE, ADDISCOMBE.

PROPERTY in the parish of Addiscombe having fallen much in value since the commencement of this church, the work of its completion has been slow.

The first portion (shown on the plan by the hatched lines) was erected in 1868-9 by the late E. B. Lamb, and consisted of the chancel, east portion of the nave, the two transepts, and the baptistry, vestry, and lowest stage of the tower. The latter was left open, having only a temporary wooden porch placed against the door opening into the baptistry; this was, at that time, the main entrance door.

The lower stage of the tower has been lately completed from designs prepared by Mr. E. B. Lamb, son of the original architect, by adding a lofty three-light window on the south, and an entrance at the east with a similar three-light window above it. The temporary porch was removed, and replaced by double arched and traceried stone screen between the tower and the baptistry, the two arches meeting on a jasper marble column. The entrance doors are of oak, lofty, and with traceried panels. The screen doors are of oak with teak panels, and a cresting of tracery and shields carried over the head.

The west side of the church is enclosed by a temporary wall constructed of quartering and plaster. Owing to some difficulties between the diocesan authorities and the vicar designate, public worship was not carried on for some time, and the building became much neglected and uncared for after the death of the original architect. The insufficient protection occasioned by the temporary wall, being allowed to become ruinous, caused much damage to the interior.

On his appointment to the living, the present vicar, with the help of donations from the parishioners, restored the damaged portions, and much money has been spent since on furnishing and decorating the church.

The roof is open-timbered, and very elaborate, intersected at the crossing, and with hammer-beams and struts brought down the piers, and resting on four small marble columns to each pier. The span of nave and transepts, from centre to centre of piers, is 42 ft. The nave roof continues down over the aisles, with arched ribs under the valleys resting on stone corbels, and terminating with a buttress outside. A flèche gives both ventilation and light at the intersection of the nave and transept roofs, and sheds picturesque rays of light through the timbers. The church is designed in the Late Decorated period, but treated freely and untrammelled. The windows are lofty, and afford ample light, consistent with a reverent quietness. The temporary wall at the west still remains, for want of funds to carry out the completion.

The chancel is wide and deep, the windows standing back within an arcade of stone arches, with traceried spandrels resting on marble columns. There is a large crypt under the chancel, which will accommodate a congregation of 100 people.

A new stone credence table, designed by Mr. Lamb, has been erected on the south side of the chancel, with a traceried canopy and a cluster of marble columns supporting the table.

The interior of the church is unique in form, and very spacious, and will, when completed, afford seating on the area for over 1,000.

The view shows the design for the completed west end and eastern tower, all of which still remains to be done.

The architect for all the additions is Mr. E. B. Lamb, of London.

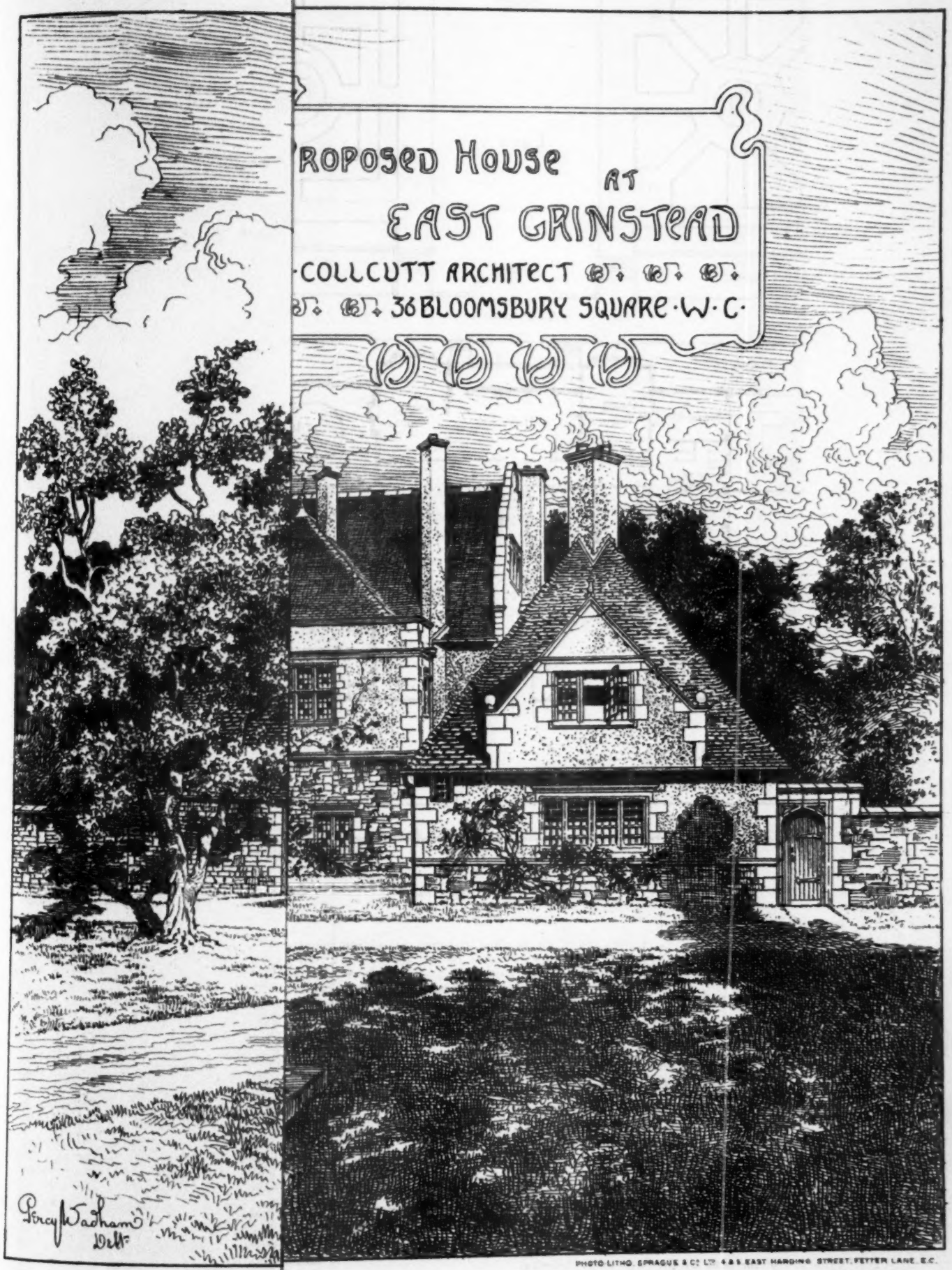
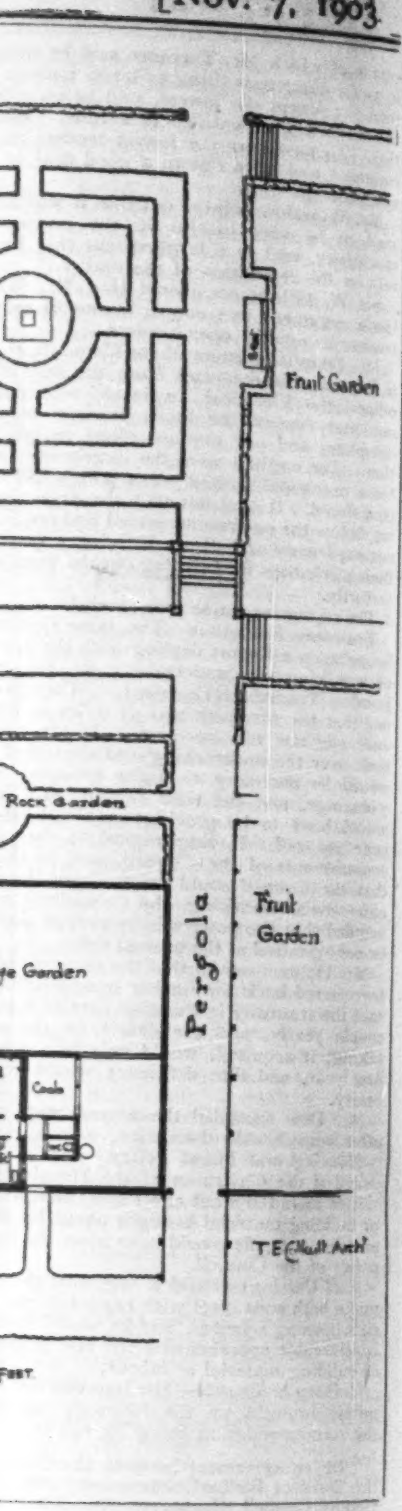


PHOTO-LITHO. SPRAGUE & Co LTD. 4 & 5 EAST HARDING STREET, FETTER LANE, E.C.



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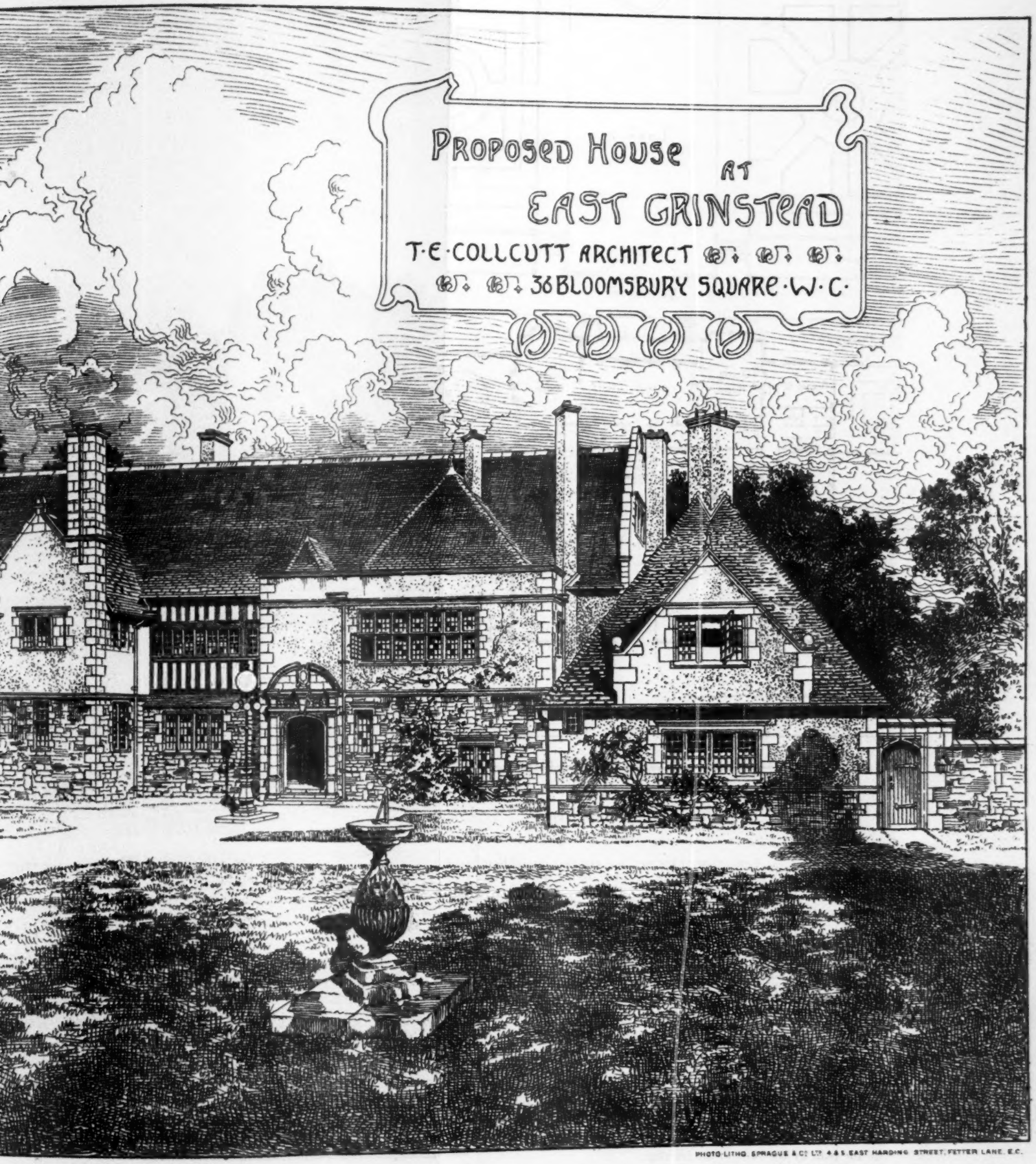
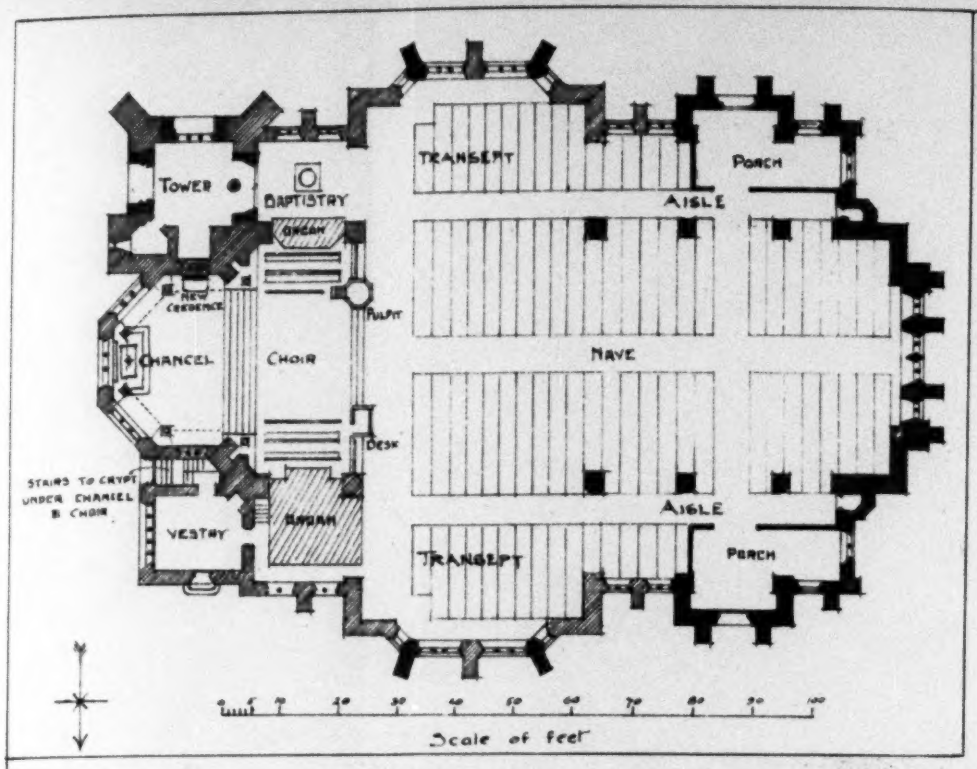
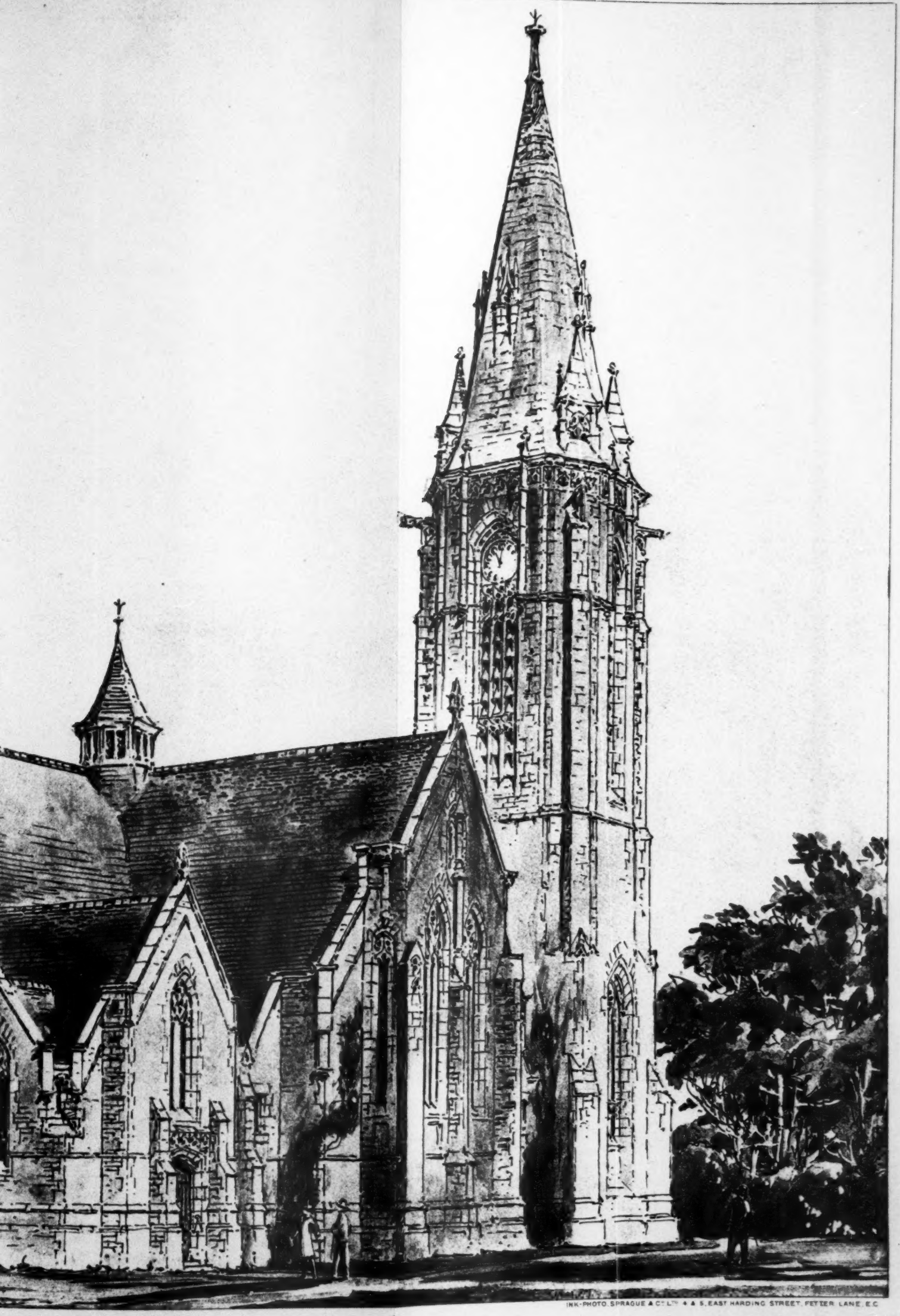


PHOTO-LITHO. SPRAGUE & Co LTD 4 & 5 EAST HARDING STREET, FETTER LANE, E.C.



ADDITIONS, ST MARY MAGDALENE,



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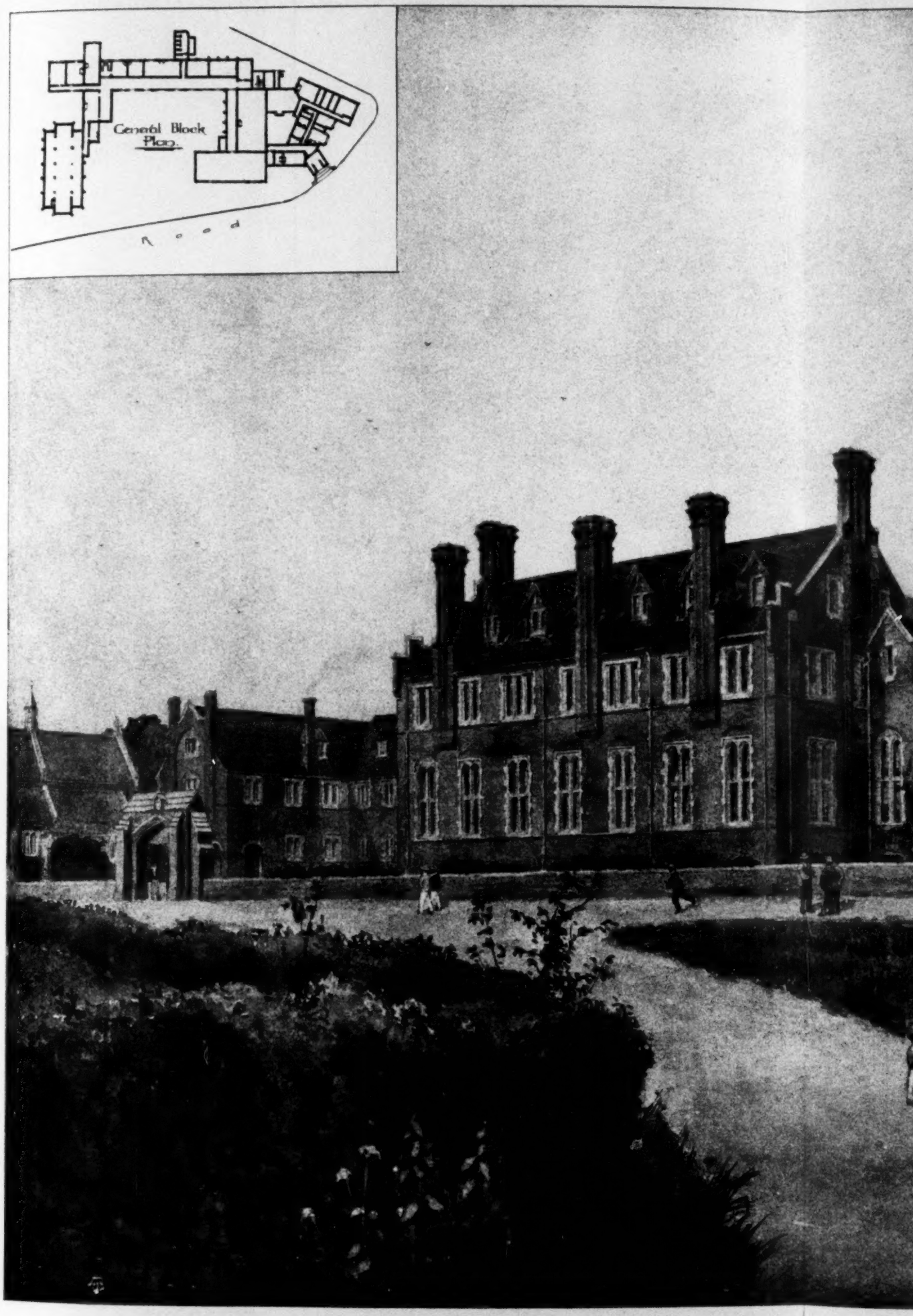
AGDALENE, ADDISCOMBE.—Mr. E. B Lamb, Architect



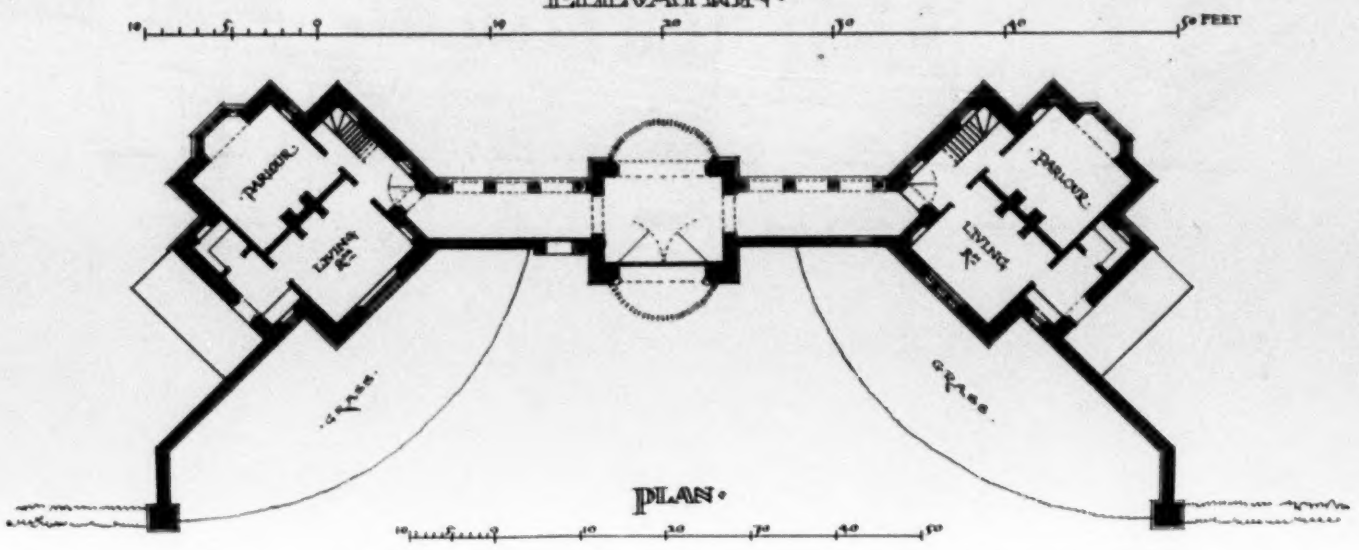
ST. MARY'S COLLEGE, WOOLHAMPTON, BE

INK PHOTO SPRAGUE & CO LTD 4 & 5 EAST HARDING STREET, FETTER LANE, E.C.

IPTON, BERKS.—Mr. Frederick Walters, F.S.A., Architect.

TODDINGTON · GLOS · NEW · ENTRANCE · LODGES ;

ELEVATION ·



PLAN ·

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PHOTO LITHO SPRAGUE & CO LTD 4 & 5 EAST HARDING STREET FETTER LANE E.C.

THE BUILDER, NOVEMBER 7, 1903.

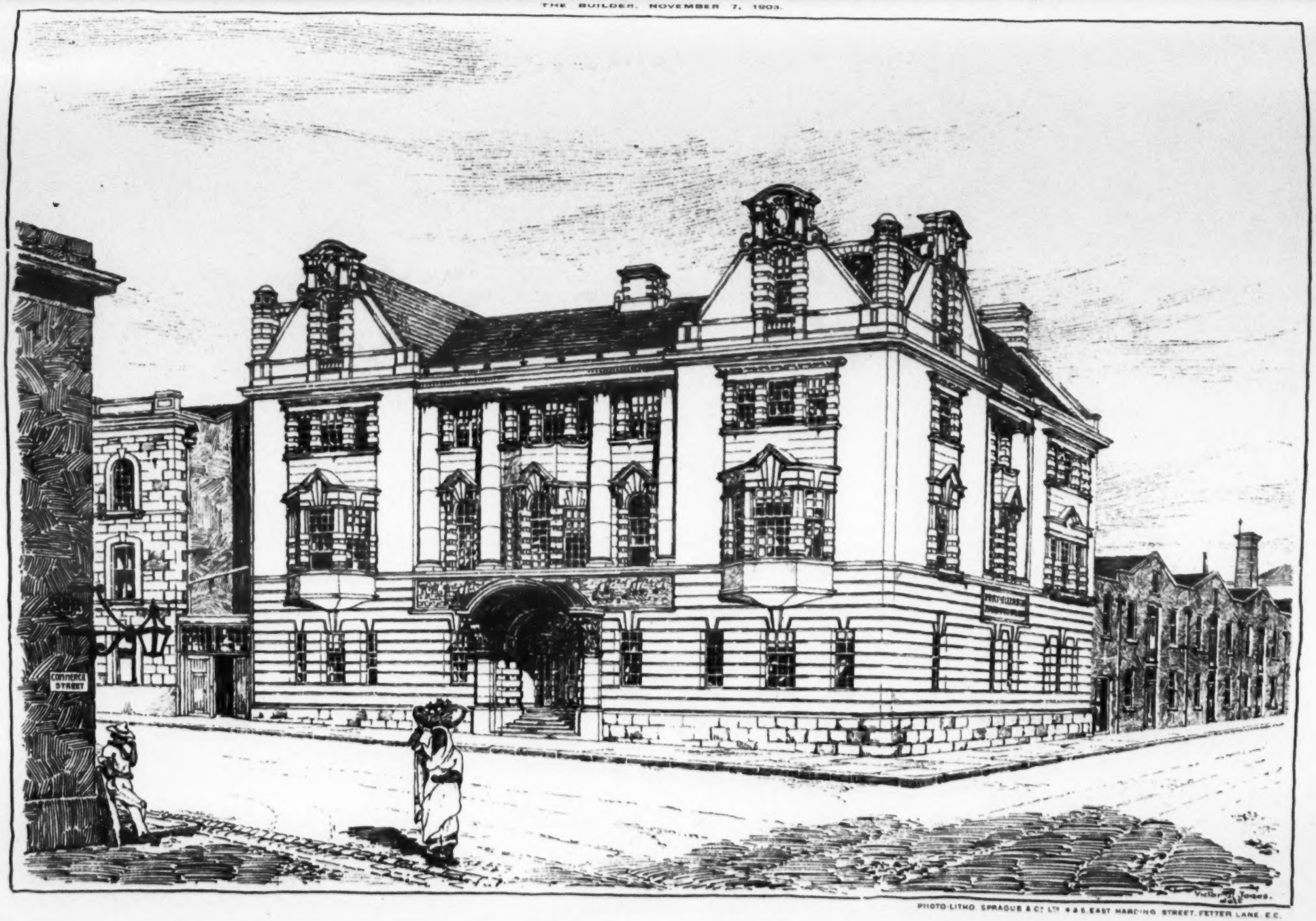
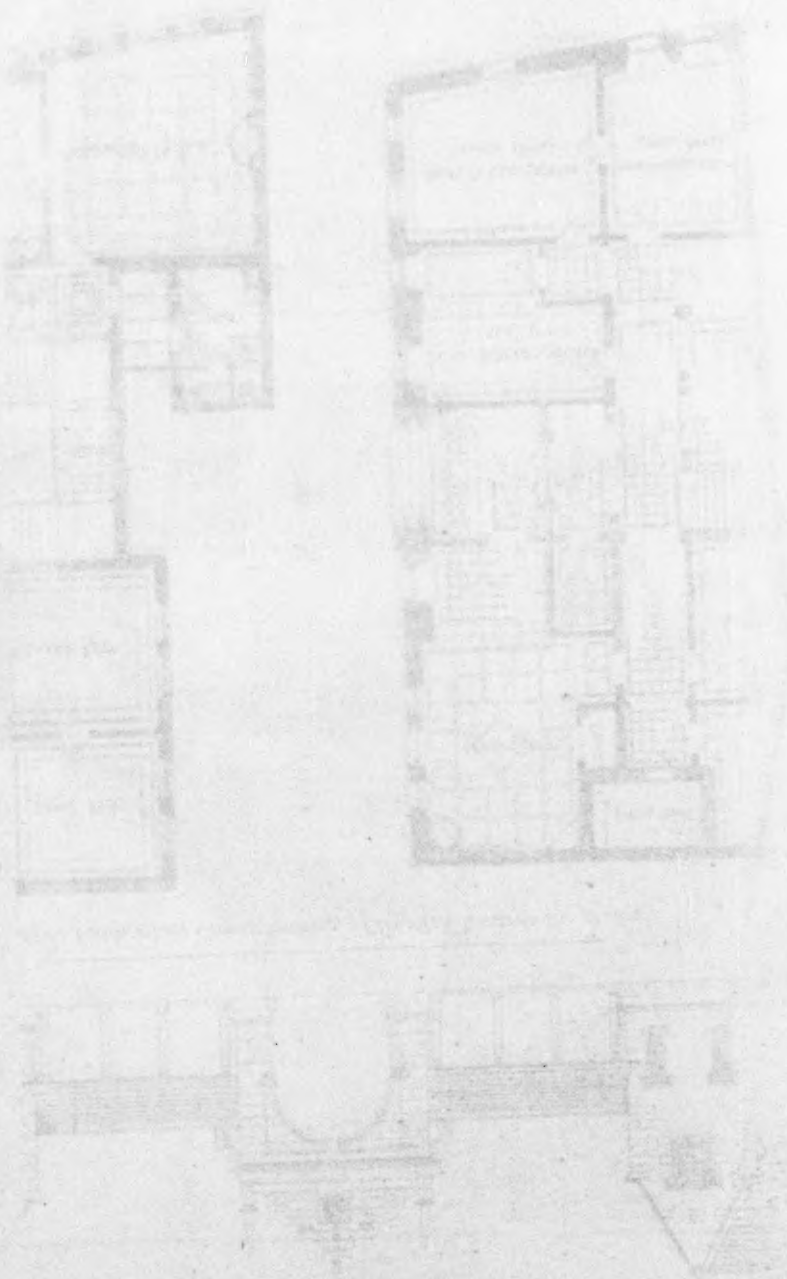
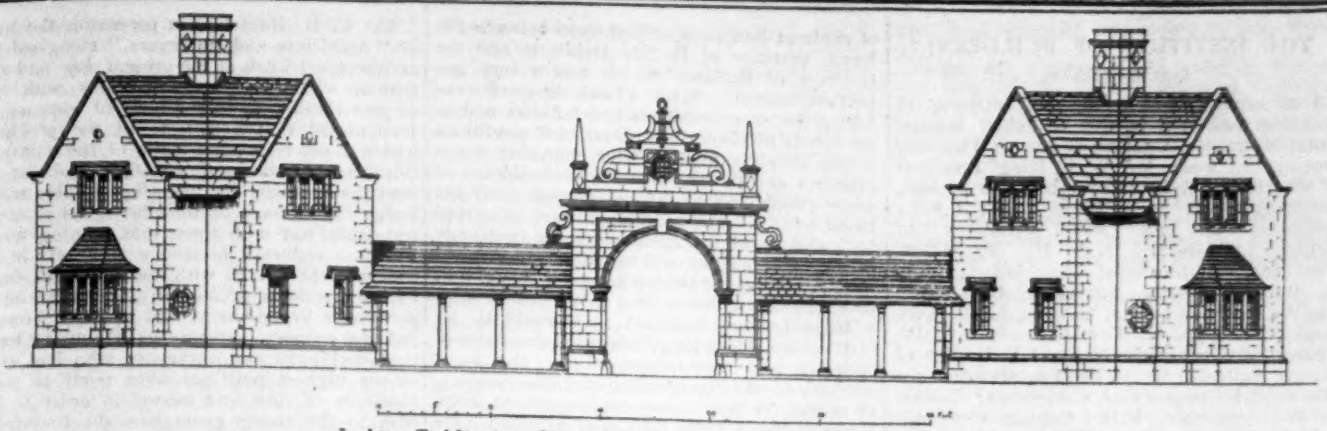


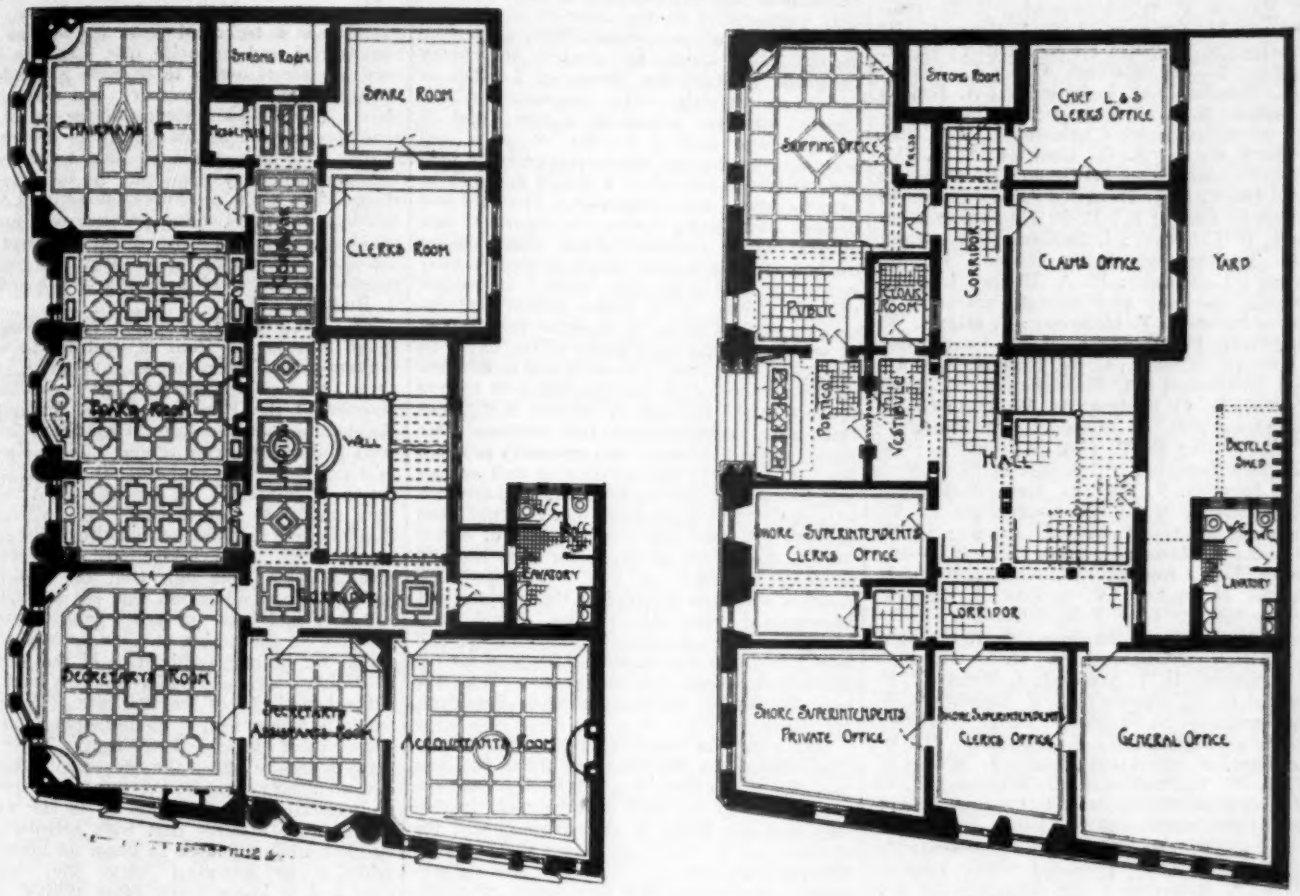
PHOTO-LITHO SPRAGUE & Co LTD 4 & 5 EAST HARDING STREET, FETTER LANE, E.C.

ADMINISTRATIVE OFFICES FOR THE PORT ELIZABETH HARBOUR BOARD.—Messrs. Jones & McWilliams, Architects.





Lodges, Toddington, Gloucestershire. Elevation towards the grounds.



Ground Plan. First Floor Plan.

Administrative Offices, Port Elizabeth Harbour Board. Plans.

ST. MARY'S COLLEGE, WOOLHAMPTON, BERKS.

With the exception of the chapel, the whole of the existing buildings of this college have been erected since 1885, the latest portions, which are the most prominent in our illustration, having been completed in 1895.

The college was erected for Catholic educational purposes, and was intended for the reception of boys proposing to follow later on either an ecclesiastical or professional career. The buildings provide accommodation for about 150 students, together with the requisite number of professors, and in addition there is a domestic block occupied by the matron and servants. On the ground floor there is a spacious study hall and dining hall, together with classrooms of various sizes, all connected by a cloister. On the upper floor, with the exception of the dining hall, which is carried to the full height of the building, are the dormitories and professors' rooms.

In the illustration the buildings on the right comprise the domestic block; the tower in the central position forms the main entrance for visitors to the college, and gives access to the reception-rooms and, by a staircase, to the masters' quarters. The large block on the left comprises on the ground floor the study hall, and, above, the rooms of the masters.

The whole of the buildings are externally of red brick, with Ham Hill stone dressings and tile roofs. The total cost has been about 18,000*l*. The architect is Mr. Fredk. A. Walters, of Westminster, and the contractors for the main portion were Messrs. James Longley and Co., Crawley, Sussex.

NEW ENTRANCE LODGES, TODDINGTON, GLOUCESTERSHIRE.

These lodges have been designed for the main entrance into Toddington Park, and will be seen, when approached from the house, at the end of a long, straight drive.

They are to be built in local stone, and the roofs covered with stone tiles. Mr. E. J. May is the architect.

NEW ADMINISTRATIVE OFFICES, PORT ELIZABETH HARBOUR BOARD.

The design for this building, which is now in course of erection, was selected by the Harbour Board Commissioners in a limited competition held in August last year.

The exterior is of brick, faced with cement rough-cast and smooth cement work (the ship frieze over portico also being modelled in cement), and all coloured white, on a plinth of blocks of imported red sandstone; the roof is of Westmorland green slates, the whole of the external window frames and doors being of teak. All the windows to the principal suite of rooms on the first floor will be double glazed to prevent annoyance from the noise of the waggon traffic which constantly passes this corner.

The portico steps will be of marble, and the floors of vestibule, hall, and corridors on ground floor of slabs of red and white marble. Lavatory floors and walls tiled. The upper floors are of concrete and steel fire-resisting construction.

The various contracts for the work amount to about 25,000*l*. The architects are Messrs. Victor T. Jones and W. J. McWilliams, of Port Elizabeth and Johannesburg; the builder Mr. J. Kohler, of Port Elizabeth; the steelwork contractors Messrs. Dorman, Long, and Co., of Middlesbrough, while the whole of interior hardwood panelling, staircase, and decorative materials, etc., are being supplied by Messrs. Liberty and Co., of London.

MR. H. W. BREWER'S DRAWINGS.

So much interest has been evinced in the collection of the late Mr. H. W. Brewer's drawings on view at the *Builder* office, that it has been decided to keep it open for another week, Saturday excluded; that is, till Friday, the 13th inst. Admission between the hours of 12 and 3, on presentation of address card.

Memorial Tablet, Nottingham.—A memorial has been erected to the memory of the Rev. L. Wilkins, in St. James Church, Nottingham. It takes the form of a bronze decorative tablet, and has been designed and executed by Mr. George Frampton, R.A.

THE INSTITUTE OF BUILDERS:

ANNUAL DINNER.

The annual dinner of the Institute of Builders was held in the Whitehall Rooms, Hotel Métropole, Charing Cross, on Thursday evening last week, Mr. W. F. King, President in the chair. A large company was present, including:—Mr. Aston Webb, R.A., F.S.A., President of the Royal Institute of British Architects; Mr. H. T. Hare, President, Architectural Association; Mr. A. Buck, President, Surveyors' Institution; Sir W. Emerson; Sir J. Sawyer, M.D. (London); Colonel S. G. Bird, C.B.; Mr. C. W. Green, President of the National Federation of Master Builders; Mr. P. Preston, Master of the Worshipful Company of Carpenters; Colonel C. W. Stephenson, V.D.; Captain Hemphill, L.C.C.; Mr. E. White, L.C.C.; Mr. H. J. Williams, L.C.C.; Professor R. E. Smith; and Messrs. T. W. Aldwinckle; S. D. Adshead; T. D. Atkinson; J. J. Appleby; C. H. Barnsley; S. Barnett; H. A. Bartlett; H. H. Bartlett; G. W. Blackall, C.E.; L. Blake; A. C. Blomfield; C. J. Blomfield; A. Boden; S. Bolten; E. A. K. Briggs; J. Carmichael; H. Carter-Pegg; W. Clarkson; J. H. Colls; A. W. S. Cross; A. W. Cooksey; S. B. Depree; E. Dummett; A. Dixon; B. Dawson; F. L. Dove; F. J. Dove; G. Oliver Estcourt; Alderman Ellis, J.P.; B. P. Ellis; B. Greenwood; B. J. Grover; J. Gallimore; W. Grant, J.P.; T. Gregory; J. S. Gibson; H. W. Horner; L. Horner; H. A. Heffer; J. A. S. Hassall, Secretary of National Federation of Master Builders; T. Holloway; F. Higgs; W. Higgs; H. F. Higgs; F. H. A. Hardcastle; J. Hunt; J. Hudson; C. W. Hall; J. S. Holliday; J. Herbert; A. Harrison; R. A. Hill; W. Hill; G. C. Hudson; H. W. Hill; G. W. Humphreys; R. S. Henshaw; J. Hindsley; C. Heathcote; E. T. Hall; G. Inskipp; W. Campbell Jones; C. E. King; A. A. Killby; E. J. Kett; G. R. Kett; G. Kett; A. Krauss; W. J. Locke, M.A.; H. Lovegrove; D. W. McInnes; F. G. Minter; J. Morely; F. M. May; L. J. Maton; F. May, J.P.; H. Northcroft; H. M. Newlyn; W. Nicholson; A. E. Parker; H. Porter; W. A. Pite; J. Randall; T. Rowbotham, J.P.; T. M. Rickman, F.S.A.; E. S. Rider; C. J. Smithem; E. J. Strange; G. G. Scott; W. Sapcote; W. H. Scrymgeour; E. J. Stubbs; H. T. Steward; J. Slater; T. H. Smith; G. C. Sherrin; H. P. Shepherd; W. Shepherd; W. S. Shepherd; H. J. Treadwell, A. W. Turnbull; E. J. Turnbull; H. W. Trollope; F. Wall; H. Wall; J. Wells; C. Wall; W. F. Wallis; T. B. Whinney; F. G. Wallis; J. A. Wallis; and T. Costigan, Secretary of the Institute of Builders.

The loyal toasts having been honoured, Mr. E. White, L.C.C., proposed "The Imperial Forces." Referring to the reform of the War Office, he said that that task might be undertaken by a committee of the master builders, or, failing them, the L.C.C., who would not be likely to refuse.

Colonel Stanley G. Bird, C.B., responded. Speaking of the Report of the War Commission, he said that that report was signed by a builder and contractor, *i.e.*, Sir John Jackson, and that was the only instance on record, he believed, of a builder sitting on a Royal Commission, and that Institute ought to congratulate itself in having had one of its members honoured in this way. He thought that builders and contractors played an important part in the defence of their country, seeing what they did in the work of constructing harbours, docks, etc.

Sir William Emerson proposed the toast of "The Institute of Builders and President." He said that occasions of that kind served to enhance the good feeling which should exist between architects and builders, and on occasions such as this dinner this feeling was not clouded by some impending and portentious bill of extras. Confidence between architect and builder was necessary for the proper carrying on of work. However beautiful a design might be, it ran great risk of being spoilt if the work was inferior or faulty, and in the matter of the embellishment of a city or town a great deal depended upon builders—quite as much as upon architects. That was a very important matter, because most nations were judged by the buildings they left behind them. The Institute of Builders was doing very good work in many ways, and there was one matter in that connexion he would specially refer to. At last, after a number of years, a form of conditions of contract had been agreed upon between the Royal Institute of British Architects and the Institute of Builders, which was a very important matter. Such a step inspired confidence between architects and builders and in the minds of clients. Without such conditions it was simply a matter of the character of the architect and the character of the builder, and many people looked dubiously upon contracts based on this. The form of contract as agreed to would be of the greatest use to everybody in the country concerned in building matters—in fact, beyond the British Isles, for they might be interested to know that in connexion with a large building contract that would be let in Calcutta before long, this particular form of contract had been approved by the legal advisers to the Government of India, subject, of course, to those necessary changes to make it applicable in India instead of England. He believed he was right in the belief that the Institute of Builders had been in touch with the City Corporation on the question of the congested state of our streets, with a view to seeing if it would be possible to convey materials through the streets of London at certain hours only. The congestion of our streets was an important matter, and if builders who used a number of carts and waggons could make some arrangements with the officials to this effect it would do much to help to relieve this congestion. The past and present commercial feeling in regard to our streets, which resulted in our streets being made so narrow in order to get as much money out of the land as possible, made it impossible to get streets of a proper width, and the remedy seemed to be to decrease the number of vehicles in the busy hours of the day. In connexion with every profession and trade there was some sort of an examination, and he had heard that the Institute of Builders thought of instituting examinations for builders. He thought that that was a very necessary proceeding. He thought that builders, as well as doctors, lawyers, architects, surveyors, and accountants should give some proof that they had been suitably educated and were capable of carrying on their work properly, for both life and property depended on that. He hoped that builders would be guarded in their aspirations heavenward, otherwise London would soon become a city of skyscrapers, like Chicago and New York, and that would not be good for the physical development of the people. With the toast he coupled the name of their President, Mr. King.

Mr. King, in reply, said that one of the chief reasons for the existence of the Institute was the promotion of good feeling between architects and builders, and he took it that they had not failed in that respect, and the presence of so many architects that evening was an indication that that effort was reciprocated. He thought that they might congratulate themselves on having got rid of that hardy annual the conditions of contract. He hoped that those conditions would grow in favour, and he believed that they would all feel the advantage of the work which had been accomplished. The advantage of such a settlement would be more apparent as time went on. They owed the settlement to the President and Council of the Royal Institute of British Architects and several other gentlemen, who had laboured for years in the matter. He had a most grateful recollection of the courtesy and kindness with which he was received by the President and Council of the Institute of Architects, and of the businesslike manner in which the builders' proposals were considered. He desired, also, to congratulate the Institute of Builders that this matter had been carried through at last. In the year's work he thought that the Institute's influence had been well maintained. In negotiations with the City Corporation and the L.C.C., they had been able to make their influence felt. Though they had nothing to report with regard to technical education, he thought they had been able to effect some good. More interest was taken by builders in the Institute, and the fact that their membership was increasing year by year showed that members of council and committee had worked for the Institute very zealously and had watched its affairs very closely. The amount of time they had given on its behalf was very considerable. He thanked them for their kindness and courtesy to him, for that had made his tenure of office most pleasant. Once more he would like to refer to their able secretary, Mr. Costigan, who did such valuable work for the Institute.

Mr. C. H. Barnsley, in proposing the toast of "Architects and Surveyors," eulogised the architectural work of the present day, and said that it would compare favourably with that of past times. As to the form of contract, he was afraid that architects in the provinces had not yet risen to a sense of the equity of this form of contract, and they had not yet seen the necessity for adopting it. He would suggest that some of the distinguished architects they had with them that evening might use their influence to induce architects in the provinces to fall in with the universal desire to have a form of contract which would be acceptable by architects and builders throughout the country. It was gratifying to know that architects and surveyors who had risen to the highest positions were ready to make sacrifices of time and money in order to impart to the rising generation the knowledge they had obtained by years of hard work and experience. Builders ought to be men of practical standing; they ought to know their business in a technical sense as well as in a commercial and financial one. In the same way, architects ought to be fully grounded in the technicalities of their art, and they should have a thorough knowledge of the art of construction as well as the ability to design, for if they had they would be able to set before builders what they required. As to surveyors, the builders in the provinces envied the London builders, for the London practice was not the provincial one. The provincial architect was too often his own surveyor. With the toast he coupled the names of Mr. Aston Webb and Mr. A. Buck.

Mr. Aston Webb, R.A., in responding, referred first to the form of contract to which reference had been made. Thanks, in a great measure to the tact and conciliatory manner of the President of the Institute of Builders, a complete form of conditions of contract had at last been agreed upon—as perfect as it was possible to make it. In regard to education, it interested the Institute of Architects very much to know that the Institute of Builders were thinking of adopting some system of education. The Institute of Architects discovered some time ago that the "pick-me-up" system of education was not a good one, and they had been for years endeavouring to systematise and arrive at some process of education for young architects. If the Institute of Builders seriously undertook this work, and if the experience of the Institute of Architects would be of any use, it would be placed at their service most gladly and willingly. There were many points in which the education of builders and architects must be the same; the question of materials and questions as to the various crafts, were matters that both architects and builders were supposed to know all about. In addition to knowing what they wanted, they had to know many other things, and it had struck him that one craft or trade might be dispensed with. He would mention that craft—the craft of the carpenter—with a good deal of diffidence, especially as they had with them that evening the Master of the Carpenters' Company (though the interests of the Company were wide, and extended far beyond the particular trade of carpenter). He was sorry to say it, but he thought that that trade could be to a great extent dispensed with, it was to some extent a relic of mediævalism, and he did not think that they would be sorry to see the end of those span roofs with Bangor slates over a flat ceiling, which was an inflammable thing and harboured dirt. He believed that an iron and concrete roof would be very much better. He thought they could dispense with sagging floors they saw in so many houses, and rotten joists, and he could not but think that iron and concrete floors would be better and quite as cheap if they were generally used. If they could dispense with those creaking old stairs they knew so well, and have instead concrete stairs, that would be a further improvement, and he thought they could dispense with those wooden partitions which crack, plastered, and with sappy laths which spoilt our ceilings. There was one thing they would miss, and that was the grand old open timber roofs which they could not have without the carpenter. Of course, he did not include the joiner with the carpenter. Architects and builders must look ahead and try and keep themselves abreast of the times. It was essential that our forms of construction should improve. He was not as ready as some people to continually extol the past at the expense of the present. He was inclined to agree with what had been said, *i.e.*,

that we could do as good building work now as ever. The wind might roar and the waves might break, and yet, he believed, Dover harbour would exist and remain strong for centuries. The seas had made one or two attempts on it already, and had had to retire defeated. Those great buildings which were being erected at Whitehall, when time had touched them with colour, would compare well, he hoped, with buildings of the past. He trusted that as time went by, people of future times would look back on our buildings as we do on those of past ages, and would say, as we do: "They dreamt not of a perishable home who thus could build."

Mr. Alfred Buck replied for the surveyors. The Surveyors' Institution included landed surveyors, building surveyors, quantity surveyors every surveyor they could think of. He belonged to the first class, and he did not come into contact very much with architects and builders. As to the carpenter, when they had done with him he (the speaker) hoped they would send the carpenter down into the country, where he was wanted, and where he would be usefully employed in erecting such useful and necessary buildings as cowsheds and pigstyes. He was sorry to say that the carpenter, the man who could put up a rough but sound roof and who could make and hang a gate, was departing for the towns, and it would be a good thing to get him back into the country. As to examinations, if builders instituted a system of examinations, he hoped they would be better for it, but he would advise them to join the Institute before the examinations were required. The Surveyors' Institution had a system of examinations, and candidates were examined in what they ought to know—on subjects which were necessary for them to know if they were to practice their profession.

Mr. Benjamin I. Greenwood then proposed "The National Federation of Master Builders." The Institute of Builders was a National Institute, and its members came from all parts of the country. That being so, it might be thought that there was some overlapping, seeing that the Federation was a National Federation. That was not the case and, if he might say so without presumption, the Institute might be called the House of Lords of the trade, and the National Federation the House of Commons. The Federation carried on its work more efficiently than ever. The difficulties of organisation were stupendous—probably greater than in any other trade—for the interests and customs were so varied. The customs in the north were very different from those in the south, and to combine these varied interests was a most difficult problem, and had it not been for the indomitable determination and optimism of those in charge of affairs, the Federation would never have been carried to the position it now occupied. As to the form of conditions of contract, one of the chief advantages of the settlement was that when architects and builders were agreed, the client was very likely to agree without referring the matter to his solicitor. Before the present settlement, though some architect's contracts were open to objection from the builder's point of view, the solicitor's contract was a great deal worse. The present agreement was likely to be beneficial to all concerned. As to buildings of the present day, he quite agreed that they were equal in design and stability to those of the past. He would be glad to accept a contract for the erection of another pyramid in the desert of Sahara on the two conditions which appertained in the past, *i.e.* (1) time for the completion of the contract to be unlimited; (2) the price to be unlimited.

Mr. C. W. Green, President of the National Federation, who responded, said that the building trade at the present time was free from serious labour disputes, and that result was largely due to the federation by the National Federation of Master Builders' Associations. He desired to thank the President and Council of the Institute of Architects and Mr. King for the settlement of the form of contract. He rejoiced to see that the form of contract was accepted in the north as one of the finest and best forms ever issued, and the demand for it had been great. Its fairness had been specially referred to, and lawyers had said that they could not beat it. Although this result had taken some twenty or twenty-five years to bring about, it was one of the finest achievements of the various bodies concerned. He hoped that architects and clients in the provinces would be induced to accept the form.

The last toast was "The Visitors," which was suitably proposed by Mr. H. H. Bartlett, past President of the Institute, coupled with the name of Sir James Sawyer, M.D., who, in reply, said as to examinations, that in the medical profession they were over-examined. He would advise them to take care that they did not do the same for themselves. They were not improved by the over-examination of the present day. One of the best ways in which a medical man could train himself was by apprenticing himself to a medical man who had succeeded and who knew his work. If a doctor practised his calling with anything like honour and respect, he must make the prevention of disease his first aim, and his profession had always aimed at this. He thought that if every time anybody went to occupy a new house they took the opinion of a skilled architect or surveyor as to its sanitary condition, his profession would not be so necessary. He told people to watch the three D's, *i.e.*, the drains, the drink, and dryness. If people would get the opinion of a skilled architect or builder as to whether the water-supply was good, whether the walls were so built as to exclude the moisture rising from the earth, and the drainage efficient, it would be a good thing for all.

The proceedings then terminated.

FORM OF AGREEMENT AND CONDITIONS OF CONTRACT.

The following is Clause One, as revised and agreed to by the Royal Institute of British Architects, the Institute of Builders, and the National Federation of Building Trade Employers of Great Britain and Ireland, in the Schedule of Conditions of Contract:—

"The works shall be carried out in accordance with the directions and to the reasonable satisfaction of the architect, in accordance with the signed" ["said" in the old clause] "drawings and specifications, and in accordance with such further drawings, details, instructions, directions, and explanations" ["of the same" in the old clause, has been omitted] "as may from time to time be given by the architect. If the work shown on any further drawings or details, or necessary to comply with any such instructions, directions, or explanations, be, in the opinion of the contractor, extra to" ["extra to" takes the place of "in excess of"] "that comprised in the contract, he shall, before proceeding with such work, give notice in writing to this effect to the architect. In the event of the architect and contractor failing to agree as to whether or not there is any extra" ["excess" in old clause] "and of the architect deciding that the contractor is to carry out the said work, the contractor shall accordingly do so, and the question whether or not there is any extra" ["excess" in old clause], "and if so the amount thereof, shall, failing agreement, be settled by the arbitrator as provided in clause 32, and the contractor shall be paid accordingly. The contract drawings and specification shall remain in the custody of the architect, and shall be produced by him at his office as and when required by the employer or by the contractor."

In the form for use where quantities form part of the contract, the following new clause has been inserted:—

"12A.—Should any error appear in the bills of quantities other than in the contractor's prices and calculations, it shall be rectified, and such rectification shall constitute a variation of the contract, and shall be dealt with as hereinafter provided."

As to the first clause, we certainly think that the word "extra" is a more explicit and legal form of expression than "excess." The form, which is published by the Institute of Architects at 1s. per copy, is stamped by the seals of the three institutions concerned, and we are glad to know that it has given very general satisfaction.

COURT OF COMMON COUNCIL.

The usual Court of Common Council was held at the Guildhall on Thursday last week.

Mr. Wm. Cooper submitted a petition of members of the London Chamber of Commerce and firms being users or makers of lamps and signs carrying on business within and without the jurisdiction of the Corporation, asking for modifications in the regulations in regard to lamps and signs. The petition was received, and referred to the Streets Committee.

The by-laws made under section 5 of the City of London (Public Health) Act, 1902, in regard to the demolition of buildings in the City, and which were approved on October 15 last, were sealed.

Among the correspondence received was a letter from the St. Pancras Borough Council, asking the co-operation of the Corporation in obtaining legislation in dealing with contracts. The letter was referred to the Streets Committee for consideration.

The Lord Mayor laid before the Court a copy of the resolutions passed at the recent International Fire Prevention Congress, which contained suggestions for amending the Building Acts. The matter was referred to the Streets Committee.

There was some discussion with reference to a statement made at a recent meeting of the London County Council, in regard to the action of the Corporation on the subject of the Building Act Amendment Bill.

Mr. Morton explained that early in the year his Committee were instructed by the Court to arrange for a conference with the London County Council, the Westminster City Council, and the various Metropolitan Borough Councils, with the object of considering the Bill. A number of owners of property were heard, and the result was that in May last a letter was sent to the London County Council asking for copies of any proposals put forward by that body to be sent to the Streets Committee of the Corporation. That letter was acknowledged by the Council, and on June 15 a letter was received from the Committee of the Council, in which it was stated that a previous resolution had been rescinded, with the object of allowing the Building Act Committee to prepare proposals for a general amendment of the Act of 1894. Another letter was received on June 25 from the London County Council, in which it was stated that a draft of the Bill was in preparation, and asking the Corporation to make any proposals it desired. The Streets Committee of the Corporation thereupon wrote asking that a copy of the draft Bill should be submitted to them, but no reply was received from the County Council Committee. He had since been informed that the London County Council were going to drop the Bill next session. The London County Council had thought that the Corporation should prepare suggestions, and on the other hand the Corporation considered that the Council should submit to them a copy of the draft Bill, as the responsibility would rest on the County Council. The Corporation was anxious to assist the London County Council, particularly in the work of protection from fire. After further discussion the matter was allowed to drop.

In reply to a question, Mr. Deputy Pryke said that the Bridge House Estates Committee had carefully considered the question of the paving material to be used on London Bridge, and as the gradient on the south side of the bridge was somewhat steep, they had decided to lay granite sets on that portion.

A letter from the Clerk to the Croydon Rural District Council asking if the Corporation would be willing to assist in the preservation of Purley Beeches, which has been threatened with destruction, was referred to the Coal and Corn Committee for report.

METROPOLITAN ASYLUMS BOARD.

At the meeting of the Metropolitan Asylums Board on Saturday last it was agreed, on the recommendation of the Finance Committee, to apply to the Local Government Board for an order authorising the expenditure of a sum not exceeding 15,000*l.* on alterations and additions to the Fountain Hospital, such expenditure to be defrayed by means of a loan repayable within a period of five years. It was agreed also to make a similar application in regard to the erection of a boat and mast shed at South Wharf, the estimated cost being 1,275*l.*

Leavesden Asylum.—The Asylums Committee submitted a long report dealing with the disposal of sewage from this asylum. They stated that recently they had had a letter from the Hammersmith Board of Guardians urging that "steps should forthwith be taken to render the sewage harmless by proper methods before it is applied for the purpose of fertilising the land." The Committee had referred the matter to the Leavesden sub-committee, from whom they had received a report on the matter. The sub-committee reported that in their opinion there was no justification for the Board of Guardians' suggestion that the presence of tuberculosis among the patients at Leavesden was in any way due to the existing methods of disposing of the sewage. It was agreed to send a copy of the sub-committee's report to the Hammersmith Board of Guardians. The Works Committee in their report stated that they had considered the following motion which was referred to them and to the Hospitals Committee some time ago:—

"That whenever the Board may decide to pull down or alter a temporary structure at any of their infectious hospitals, or to make any

alterations in any of the permanent buildings, which might involve the removal of material from the site, it be an instruction to the committee concerned to make arrangements for all timber and other woodwork to be stacked, with a view to the same being burnt on the premises, and not to allow the same to be removed from the site unless ordered by the Board."

The Committee stated that they could not recommend the Board to agree to its adoption, as they considered that each case should be dealt with on its own merits.

MANCHESTER SCHOOL OF ARCHITECTURE.

ARRANGEMENTS have now been completed by a committee consisting of representatives of the Owens College, the Technical Instruction Committee, and the Manchester Society of Architects for giving at the Victoria University instruction and training leading to a degree in architecture. Mr. S. H. Capper, who has been appointed Professor of the new School of Architecture thus established at the University, is inaugurating his work in Manchester by delivering a series of four public lectures at Owens College. The first lecture was given on the 20th ult., when he spoke on the Monastic Orders and their architecture.

Mr. J. W. Beaumont, President of the Manchester Society of Architects, introduced the lecturer, and remarked that the recently established School of Architecture was an entirely new experiment for Manchester, and he felt certain that under the guidance of Professor Capper it would be a great success. The idea of inaugurating the school by a course of lectures open to the public was a good omen. The more the public could be induced to take an interest in the study of architecture the better it would be for the community at large and for the architectural profession. The average public man spent about one-third of his life in towns. Surely, therefore, it was incumbent upon him to see that his surroundings were of the pleasantest and most healthy kind, and he was dependent to a large extent for these things upon the architects of the city. The School of Architecture had been founded in order to give the best education possible to students of architecture, and for that reason the public ought to take great interest in it. He believed that in a few years they would see in Manchester great results from Mr. Capper's work and teaching.

Professor Capper said that it was with the object of tracing to some extent in one great movement, at any rate in European history, the connection between history and the art of architecture that he proposed to treat the subject of his four lectures. The monks and their abbeys, the great Monastic Orders of the Middle Ages, had given us at once a splendid page of European history, and perhaps an equally splendid page of architectural history. On the one hand if we went into the noble abbey of Westminster, which enshrined the history of the British people in a way that could be predicated of no other building, he thought, of any other country or time, we had history in architecture brought into the mind in a way which was quite incomparable. As Rudyard Kipling had said: "Standing in the darkness of that Abbey you can feel the wings of the dead centuries circling about your head." On the other hand if we passed into the county of Yorkshire we could not help being struck with the wonderful number, and at the same time the beauty, of the ruins there, the crumbling but still exquisitely beautiful remains of the homes of the monks who had passed away. On this the western side of northern England we had no such show of ruins, no such tributes to past history. There was, of course, the magnificent Furness Abbey, but apart from that Yorkshire could easily claim the pre-eminence in monastic ruins. Why was that? That again was a page of English history. Those ruins, so beautiful in their decay, bore witness to the savage fury of William the Conqueror and the horrors of devastation with which he overwhelmed the north of England in his final crushing and successful attempt to establish his rule. The north of England was laid prostrate. It had been, in a sense, the cradle and the nursery of civilisation in England, but it lay crushed and ruined by the devastation of William the Conqueror, and it was not until the succeeding century, until those abbeys whose ruins we now admired arose, that the work of havoc was undone, and that the land laid waste was once more brought back to fertility and tillage, and the ruin and destruction of the Conqueror were in turn effaced by the slow, patient, steady, and extremely successful work of the monks. The monks took us back to quite an early period in the story of the Christian Church. They began in the East, with the ascetics, the anchorites, men who dwelt alone. In the West there arose great monastic establishments. With the help of lantern pictures Professor Capper showed the difference between the architecture of the two classes of monks. How did this difference arise? he asked. The lives led by the ascetics and the Benedictines explained the difference. The Benedictines of the West achieved their grand results simply from the fact that they started from the idea that man could work better in community than alone. Midway between these two classes were those associated with the Celtic Church. These monks lived a quasi-isolated life, but they gave us little in the way of architecture. At Iona in Scotland there was perhaps the best type of the architecture they achieved. The lecturer proceeded to deal with the rise of the Benedictine Order, which began in the sixth century, the rules of life of the Benedictines, the progress of the Order, the subsequent rise of the Clugny Order, and then the Cistercian Order, and traced the effect of these Orders on architecture. It was the Cistercians to whom we owed the recovery of the north of England from the ravages of William the Conqueror. The Cistercian movement spread with great rapidity, especially in England. The chief reason why it found such universal acceptance was the fine one that it put the tiller of the soil, the manual labourer, on very much of an equality with the monk. It was the first time such an entirely democratic view was taken up. The Monastic Orders reached their highest point about the time of the Cistercians. The monks always represented the more active and eager side of the Church in the Middle Ages. In England there was no doubt that the abbeys helped to consolidate the realm, and paved the way for King Alfred's rule. They were of incalculable service in gathering people together, as centres around which an organised life could grow, and as outposts of civilisation.—*Manchester City News.*

APPLICATIONS UNDER THE 1894 BUILDING ACT.

THE London County Council at their meeting on Tuesday dealt with the following applications under the London Building Act, 1894. The names of applicants are given between parentheses:—

Lines of Frontage and Projections.

Bermondsey.—A one-story shop upon part of the forecourt of No. 200, Southwark Park-road, Bermondsey Mr. E. Hills for Messrs. Carter and Sons).—Consent.

Marylebone, East.—Bay and oriel windows, balconies, and a porch upon the Weymouth-street frontage of a block of residential flats proposed to be erected on a site abutting upon Great Portland-street, Weymouth-street, and Charlotte-street, St. Marylebone (Mr. W. G. Shoebridge for Mr. L. Peczenik).—Consent.

St. George, Hanover-square.—Wood and glass enclosures to an existing portico at No. 36, Charles-street, Berkeley-square, St. George, Hanover-square (Mr. W. West for Mrs. Denison).—Consent.

Wandsworth.—Wooden porticos, with wooden balustrades over, to three detached houses, on the south side of Woodthorpe-road, Putney, westward of "Yeovil" (Mr. F. C. R. Palmer for Mr. W. H. Earland).—Consent.

Norwood.†—One-story shops upon part of the forecourt of No. 129, Coldharbour-lane, Norwood (Mr. E. E. Bird for Mr. J. Hayes).—Refused.

Norwood.—One-story shops upon part of the forecourts of Nos. 125 and 127, Coldharbour-lane, Norwood (Mr. E. E. Bird for Mr. E. Jackson).—Refused.

Kensington, South.—A studio at the rear of No. 19, Cottesmore-gardens, South Kensington, to abut upon Stanford-road (Messrs. Lee and Pain for Mr. F. Roe).—Refused.

Width of Way.

City of London.—A building on the site of Nos. 8, 9, 10, 11, and 12, Half Moon-passage, Aldersgate-street, City, with external walls at less than the prescribed distance from the centre of the roadway of the street (Messrs. Woodrow and Helsdon for Messrs. W. H. and L. Collingridge).—Consent.

Dulwich.—A two-story warehouse on the north side of a public footway leading from Camberwell-green to Camberwell New-road, Camberwell (Mr. A. E. Mullins for Mrs. S. Melhuish).—Consent.

Kensington, South.—A building on the north-east side of Hornton-street, Kensington (Messrs. Chesterton and Sons for Messrs. Daw and Son).—Consent.

Southwark, West.—Two dwelling-houses on the north-east side of Lancaster-street, Borough (Mr. G. A. Lansdown for Mr. J. E. Lamerton).—Consent.

Whitechapel.—Buildings on the northern and southern sides of Romford-street, Commercial-road East, Mile-end Old-town (Messrs. R. Plumbe and Harvey for the Chairman and House Committee of the London Hospital).—Consent.

Lines of Frontage and Construction.

Hoxton.—Iron bridges and staircases at Nos. 175, 176, and 177, High-street, and Nos. 9 to 15, Anning-street, Shoreditch (Mr. F. Dudley for Messrs. R. and J. Hill, Ltd.).—Consent.

Kensington, South.—An iron and concrete enclosure to a passengers' lift at No. 26, Kensington Palace-gardens, Kensington, to abut upon Bayswater-road (Messrs. Aldin Brothers and Davies for Lady Bouch).—Consent.

Width of Way and Construction.

City of London.†—Permission to retain temporary wooden buildings on the south side of Little Somerset-street, Mansell-street, Aldgate (Mr. L. S. Hebermann).—Refused.

Space at Rear.

Kennington.—Shops with residential flats over at No. 39, Wandsworth-road, Kennington (Messrs. J. A. J. Woodward and Sons for Mr. J. Dennis).—Consent.

Line of Frontage and Space at Rear.

Battersea.—Three buildings on a site on the north-west side of Battersea Park-road, and south side of Home-road, Battersea (Mr. E. Cannell for Mr. F. Priddis).—Consent.

Wandsworth.—The retention of nine houses with bay windows on the east side of Bective-road, Wandsworth (Messrs. Boyton, Sons, and Buckmaster for Mr. W. Hattersley).—Consent.

Deviation from Certified Plans.

Whitechapel.—Certain deviations from the plans certified by the District Surveyor, under Section 43 of the Act, so far as relates to the proposed rebuilding of No. 6, Leman-street, Whitechapel (Mr. S. Hicks for Messrs. W. Coates and Co.).—Refused.

Width of Way and Deviation from Certified Plans.

Holborn.—Building upon the site of Nos. 7, 8, and 9, Summers-street, Nos. 1 to 6, Summers-court, and Nos. 11, 12, 13, and 14, Back-hill, Hatton-garden, Clerkenwell (Messrs. J. G. and H. G. Needham for Messrs. Andrews and Verioni).—Refused.

Cubical Extent.

Fulham.—A van shed on a site on the side of Townmead-road, Fulham, which together with a building adjoining will exceed in extent 250,000, but not 450,000, cubic feet (Mr. W. T. Hanman for Messrs. Macfarlane, Lang, and Co.).—Consent.

Dwelling-houses on Low-lying Land.

Rotherhithe.—Two blocks of workmen's dwellings on low-lying land situated between Fulford-street and Seven Step-alley, Bermondsey (Messrs. Brocklesby, Marchment, and East for the Metropolitan Borough of Bermondsey).—Consent.

The recommendations marked † are contrary to the views of the local authorities.

BOOKS RECEIVED.

LIGHT AND WATER. By Sir Montagu Pollock, Bart. (G. Bell and Sons.)

THE HOME MECHANIC. By John Wright. (John Murray. 12s.)

THE EVOLUTION OF EARTH STRUCTURE. By T. Mellard Reade. (Longmans, Green, and Co. 21s.)

ELECTRIC LIGHTING AND POWER DISTRIBUTION. By W. Perren Maycock, M.I.E.E. (Whittaker and Co. 7s. 6d.)

METAL WORKING: A Book of Tools, Materials, and Processes, etc. Edited by Paul N. Hasluck. (Cassell and Co. 6d.)

APPLIED ART EXHIBITION, CHELMSFORD.—There is to be an exhibition of applied art in the Shire Hall, Chelmsford, on December 1 to 5 inclusive; rather a short period for making the most use out of such an exhibition. The objects of the exhibition are stated in the prospectus as follows:—"(*a*) To stimulate the application of art to manufactures amongst all sections of the community; (*b*) to show the results produced by the students of the Chelmsford art classes; and (*c*) to raise funds towards the equipment and fittings of the new Chelmsford art buildings. The total net proceeds, after deducting expenses, will be handed over to the Chelmsford Technical Instruction Committee for this purpose." Among the objects exhibited will be a fine model of the Westminster Cathedral.

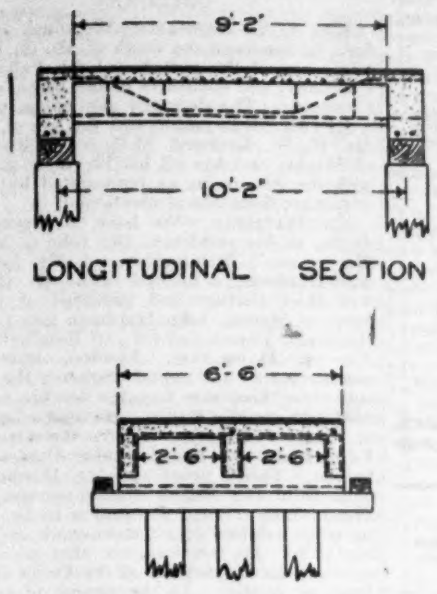


Fig. 34.

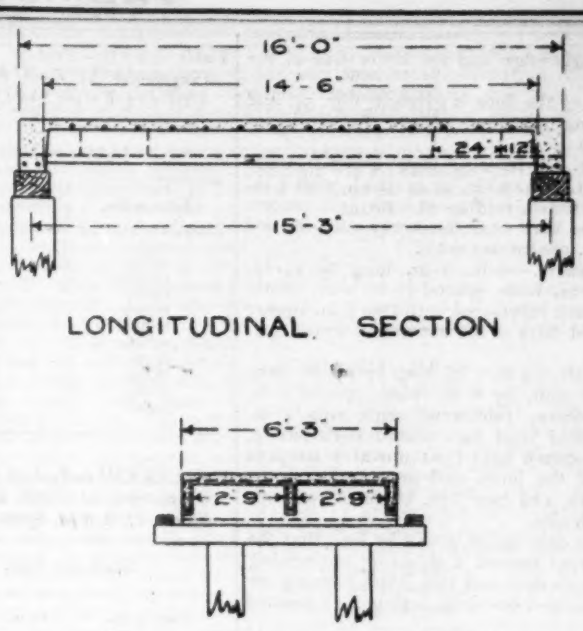


Fig. 35.

Illustrations to Student's Column.

The Student's Column.

CONCRETE-STEEL.—XIX.

EXAMPLES OF FLOOR CONSTRUCTION.

In the following notes we give particulars relative to the dimensions and general construction of some typical floor slabs and complete floor systems, and in nearly every case are appended the results obtained from actual tests.

Expanded Metal Slabs.—Table XXIII contains particulars of experiments conducted by Mr. A. C. Hurtzig, M.Inst.C.E., upon concrete-steel slabs with reinforcement of expanded steel.

The slabs were tested as beams simply supported at the ends, therefore the results may be assumed to be about two-thirds those which would have been obtained if the slabs had been supported along all four sides, or one-half those to be expected if the slabs had been incorporated in a floor system.

TABLE XXIII.—Expanded Steel Floor Slabs tested as Beams. (Hurtzig). Proportions of concrete by volume, Portland cement 1 ; sand 1 ; Thames balla t 2 : water 0 5.

Mark on Slab.	Expanded Steel. Mesh.	Expanded Steel. Strand.	Slab. Clear Span.	Slab. Width.	Slab. Age in Days.	Breaking Load. Total.	Breaking Load. Per sq foot.	Centre Deflection. (Total breaking load = 1·00.) 0·25	0·5	0·75	1·00
	in.		ft. in.	ft. in.		lbs.	lbs.	in.	in.	in	in.
1	3	⅜ × ⅜	6 6	2 0	63	6,720	516·32	—	⅝	¾	1¼
2	3	⅜ × ⅜	3 6	2 0	63	9,408	1,344·00	½	⅞	1	1⅜
3	3	⅜ × ⅜	6 6	2 0	63	7,392	568·96	⅝	⅞	1⅛	1⅝
4	3	⅜ × ⅜	3 6	2 0	63	13,440	1,919·68	—	⅝	⅞	1⅛
A	3	⅜ × ⅜	6 6	2 0	77	6,720	516·32	⅜	½	¾	1 ⅛
B	3	⅜ × ⅜	3 6	2 0	77	15,456	2,209·76	⅜	½	⅝	¾
C	3	⅜ × ⅜	3 6	2 0	77	16,800	2,400·16	½	⅝	¾	1
D	3	⅜ × ⅜	6 6	2 0	77	7,392	567·84	¼	⅜	½	¾

Table XXIV.—Test of Expanded Steel Floor Slab (supported on four sides). Proportions of Concrete :—Portland Cement, 1 ; Fine Clinker, 4 ; Age, 49 days.

Load concentrated per sq. ft.	Deflection at centre.	Remarks.
lbs.	in.	
112	—	No deflection.
140	⅛	
224	¼	
280	⅜	
336	½	Measured after an interval.
392	—	Slight crack on underside extending from corner towards centre.
448	½	
532	—	Crack across centre in direction of longest span.
588	—	Load carried 1½ hours, slab then collapsed.

Table XXIV. shows the deflection of a concrete-steel slab as reported by Mr. A. T. Walmisley, M.Inst.C.E.* This slab measured 12 ft. 6 in. by 11 ft. by 5 in. thick, and was composed of 1 : 4 clinker concrete, with expanded metal reinforcement near the under surface. The metal had a 3 in. mesh, and ⅜ in. by 3-16 in. strands, and was laid in four sheets with a 12 in. lap, the overlapping meshes being secured by steel clips. A 3 in. support was provided along the four sides of the slab.

* Proc. British Association, 1900.

Expanded Metal Floor for Office Building.—A series of useful tests upon an expanded metal floor was conducted in 1900 by Dr. Bovey and Mr. Kennedy at La Presse Building, Montreal. The floor slab was essentially a sheet of concrete about 3 in. thick, reinforced by expanded steel embedded about 1 in. above the lower surface. The sheet rested upon steel girders and floor joists encased in concrete, both connected with the same material in the floor slab.

It will be seen that although the slab was of concrete-steel, the floor as a whole does not represent true concrete-steel construction. For this reason we do not state any of the results obtained from test No. 1 upon the complete floor.

Test No. 2 related to one panel of the slab, and is suitable for our present purpose. This panel measured 13 ft. 2 in. by 7 ft. 4 in. between the supports, and 3 in. thick. A layer of sand was spread about 12 in. wide over the middle of the panel along the 13 ft. 2 in. span. Over this a pine board 1 ft. wide was laid for supporting the load.

The uniformly distributed load upon the panel was 240.3 lbs. per square foot, and the maximum concentrated load was 120 lb. per square foot spread over the longitudinal axis for a width of 12 in.

Table XXV. gives the deflection under the several loads applied.

After removal of the external load, the deflection was found to be 0.02 in. at the left support, 0.04 in. at the right support, and 0.02 in. at the centre of the span.

Test No. 3 related to a panel measuring 14 ft. by 6 ft. by 3 in. thick, under a heavy distributed load.

A thin layer of sand was spread over the slab, and on this 1 in. pine boards were laid, upon which pig iron and bags of sand were placed. Table XXVI. shows the central deflection under the various loads.

Table XXV.—Test of Expanded Metal Floor Panel (Concentrated Loads).

Total Load in lbs.	Deflection in inches. At Supports. Left.	At Supports. Right.	At Centre.
2,500	0·045	0·08	0·07
5,000	0·100	0·13	0·14
8,000	0·140	0·19	0·22
10,000	0·180	0·24	0·28
11,580	0·220	0·28	0·34

Table XXVI.—Test of an Expanded Metal Floor Panel. (Heavy Distributed Loads.)

Total load in lbs.	Time.	Load in lbs. per sq. ft.	Deflection at centre in inches.
0	10.15 a.m.	—	—
12,300	10.55 a.m.	0·120	128·6
22,800	11. 5 a.m.	0 285	238·5
32,800	—	0 505	343·1

After removal of the load, the recovery was as follows :—

Total load in lbs.	27,800	25,300	0
Central deflection in ins.	0.500	0.480	0.085

A little later the deflection at the centre became 0.08 in., and it was thought that further recovery would be evidenced after a longer interval had elapsed.

Ransome Floor Panel (experimental).—Comparative tests of full-size floor panels were made in September, 1902, for the Building Department of the Borough of Richmond, New York. These experiments were intended to throw light upon the actual relation of theory to practice in commercial construction, and to satisfy the officials as to the strength of the Ransome system of twisted steel reinforcement.

The concrete in the first floor tested was mixed in the proportions of 1 part of Portland cement, 2 parts clean sharp sand, and 4 parts gravel varying from ¼ in. to ¾ in. diameter, and sufficient water was used to flush readily to the surface in tamping.

Deflection was measured, by means of an engineer's level, on a rule set upon the middle of the centre joist, and also on top of the concrete over the supports. The differences of these readings permitted correction for any errors due to settlement of the supports. The total displacement was also checked by means of a bevelled gauge moved between a hori-

zontal straight-edge and the lower side of the centre joist.

A section of the floor is given in Fig. 34, and the following statement shows the details of construction :—

Top Slab.—9 ft. 2in. long between main girders, 6 ft. 6 in. wide, 3½ in. thick with ¾ in. granolithic finish, reinforced with ¼ in. square twisted steel bars near the lower surface, and spaced 6 in. centre to centre.

Main Girders.—6 ft. 6 in. long by 24 in. deep by 12 in. wide, spaced 10 ft. 2 in. centre to centre, each reinforced with two ½ in. square twisted steel bars 2 in. above the lower surface.

Floor Joists.—9 ft. 2 in. long by 13½ in. deep below floor slab, by 6 in. wide, spaced 3 ft. centre to centre, reinforced with two ¾ in. square twisted steel bars placed horizontally, two ¾ in. square bars bent upwards towards the ends of the joists and anchored into the main girders, and four ¾ in. U-shaped stirrups placed vertically.

From this description it will be seen that the complete panel formed a structure comprising a slab, two girders and two joists forming an outer frame, and one joist acting as a central rib.

It should be noted, however, that continuous supports were fixed below the two end girders, so that these members were not subjected to any direct load.

Loading was effected by piling pig iron over the middle joist on a width of 3 feet between the end girders, and when the load of 110,218 lb. or 4,007 lb. per square foot, was reached, the central deflection was about 1-16 in.

As no more pig iron was then available, it became necessary to abandon the test. Consequently, no theoretical deductions could be established, but the result quoted is quite sufficient to show the strength and rigidity of the construction.

Two other floors were afterwards tested, one of concrete made as stated above, and the other of concrete mixed in the proportions of 1 part Portland cement, 2 parts sand, and 4 parts ¾ in. screened trap rock.

Fig. 35 shows the section adopted, and the details of these floors were as follows :—

Top Slab.—14 ft. 6 in. long between main girders, 2½ in. thick, reinforced with ¼ in. square twisted steel bars near the lower surface, and spaced 12 in. centre to centre.

Main Girders.—6 ft. 3 in. long by 18 in. deep by 9 in. wide, spaced 15 ft. 3 in. centre to centre, each reinforced with two ¾ in. square twisted steel bars 2 in. above the lower surface.

Floor Joists.—14 ft. 6 in. long by 9 in. deep below floor slab, by 3 in. wide, spaced 3 ft. centre to centre, reinforced with one ¾ in. square twisted steel bar placed horizontally, and anchored into the main girders, and four ¼ in. U-shaped vertical stirrups.

Tables XXVII. and XXVIII give the centre deflections under various distributed loads for these two floor panels, the loads being applied on a width of 3 feet, as in the other case, between the end girders, which were supported on timber frames resting on piles.

In the gravel concrete panel, the first sign of failure was observed between loads of 28,652 lb. and 30,952 lb. Fine vertical cracks then appeared at regular intervals near the centre of the span, diagonal shearing cracks appeared at 30,952 lb. load, about 2 ft. from the supports, and these cracks increased in size until at the maximum load the openings were about ¼ in. wide. Cracks were also developed at the junction of the floor slab with the supporting girders.

In the stone concrete panel, the first evidence of failure occurred between loads of 25,477 lb. and 28,756 lb., when diagonal shearing cracks commenced, and increased proportionately with the loading.

Both panels showed a satisfactory degree of elasticity, but the concrete made with gravel proved to be stronger than that made with broken stone.

Failure resulted from shear, and not by exceeding the ultimate strength of the steel in tension or of the concrete in compression. This result shows the advantage to be derived from the use of reinforcement disposed so as to withstand shearing stresses.

Ransome Floor for a Foundry.—This floor was built in Paterson, New Jersey, for a foundry having a main building 100 ft. long by 88 ft. wide, and a wing 100 ft. long by 22 ft. wide. The floor was built at street level, and was proportioned for a load of 250 lb. per square foot. It was made in panels 22 ft. long by 5 ft. 6 in. wide, the material being 2 : 3 : 5 Portland cement stone concrete. The beams, joists, and floor slab are reinforced with twisted square steel bars in accordance with the Ransome system.

Table XXVII—Test of Ransome Floor Panel (Supported at Each End). Gravel Concrete Steel—14 ft. 6 in. Span.

Distributed Load		Centre Deflection in inches.
Total in lbs.	Per sq. ft. in lbs.	
9,800	225	1/16
11,046	253	1/16
13,323	310	1/16
16,642	382	1/16
19,378	450	1/16
22,696	521	1/16
25,501	586	1/16
28,652	658	1/16
32,680	752	1/16
35,800	822	1/16

Table XXVIII.—Test of Ransome Floor Panel. (Supported at Each End). Stone Concrete-Steel—14 ft. 6 in. Span.

Distributed Load.		Centre Deflection in inches.
Total in lbs.	Per sq ft. in lbs.	
9,559	219	1/16
11,228	258	1/16
13,900	319	1/16
16,528	379	1/16
19,879	456	1/16
22,925	527	1/16
25,477	585	1/16
28,756	661	1/16
31,097	712	1/16
32,784	753	1/16

The floor slab is 4 in. thick, with a ¾ in. finish of 1 part of cement and two parts of sand with 50 per cent. ¼ in. gravel, and is reinforced with ¼ in. square bars spaced 6 in. apart.

The slab is carried by concrete-steel joists, 22 ft. long by 7 in. wide at the top, tapering down to 6 in. at the bottom, and projecting 12 in. below the slab. The joists are spaced 5 ft. 6 in. apart, and are reinforced at the bottom with two 1¼ in. square bars.

The joists are carried by concrete-steel girders, supported on cast-iron columns, which are spaced 11 ft. apart in rows 22 ft. apart. The girders are 14 in. deep by 9 in. wide at the top, tapering down to 8 in. wide at the bottom, and are reinforced by two 1¼ in. square bars.

Both the girders and the joists are monolithic with the floor slab, and each section of 22 ft. by 11 ft. was completed in one continuous operation. At the walls, the girders are supported on steel I-beams framed into the columns.

Since the completion of the floor, core ovens have been built upon it, heavy castings have been moulded and poured at any convenient part, and 20-ton loads have been wheeled across on the flanges of a four-wheeled truck with a 6 ft. by 2 ft. wheel base. In spite of these severe practical tests, no perceptible deflection has been noticed, and no cracks or chippings have been observed from impact. The shafts for an electric motor and a blower are suspended from the floor by bolts in holes drilled through the concrete, and the bearings are said to be quite firm and solid, while there is no sign of difficulty from vibration.

Ransome Floor for a Power House.—A floor similar to that described above, is in use at the power house of the Edison Electric Lighting Company, Paterson, New Jersey. The floor slabs are 10 ft. by 4 ft. by 4 in. thick, and are reinforced by ¼ in. square twisted steel bars spaced 12 in. apart. The floor joists are 10 ft. long by 15 in. deep by 4 in. wide, and are reinforced with single ¾ in. square twisted steel bars near the bottom. The main girders are 12 ft. long by 18 in. deep by 9 in. wide, and are reinforced with three 1 in. square twisted steel bars near the bottom.

Although this floor was only calculated for a load of 250 lb. per square foot, it showed no sign of permanent set or injury under a test load of 500 lb. per square foot applied when the concrete was forty days old, and the elastic temporary deflection proved to be less than 1-32 in.

OBITUARY.

MR. A. C. KENNARD.—We much regret to have to announce the death of Mr. A. C. Kennard, one of the partners of the Falkirk Iron Company, and Chairman of the Blaenavon Iron Company. The deceased gentleman, who was a J.P. for Stirlingshire, was the son of the late Mr. R. W. Kennard, M.P. for Newport, Isle of Wight, and has all his life been associated with the iron trade, as represented by the two important firms above mentioned.

MR. HARDMAN.—We have to announce the death, at his residence, St. John's, No. 150, Hagley-road, Birmingham, of Mr. John Bernard Hardman, in his 61st year. Mr. Hardman was chief partner and principal of the two firms of Messrs. John Hardman and Co., and Hardman, Powell and Co., of Birmingham and No. 24, Haymarket, London, stained-glass manufacturers and metal workers; the former and older firm was founded by his father, a friend of A. W. Pugin. He was educated at St. Mary's College, Oscott, the Oratory at Edgbaston, and the Catholic University of Dublin. Thirty years ago Mr. Hardman was invited by the British Commissioners of the Vienna International Exhibition to be English juror for exhibits of art metal-work and jewellery; for his services on that occasion he received the knighthood of the Order of Franz Josef of Austria. In the course of last year Mr. Hardman, who played a useful, albeit unostentatious, part in municipal and local affairs, was elected Chairman of the Board of Management of the General Hospital, at Birmingham, which he joined in 1876; he served for a while on the Committee of the General Dispensary. During the period 1879-1895 he was a member of the Town Council, and took a warm interest in the material and commercial progress of the city of Birmingham. In recognition of his liberal benefactions and valued services to the Roman Catholic Church, and mainly in the diocese of Birmingham, he, in February, 1901, received a papal brief from the Vatican conferring upon him knighthood in the Order of St. Gregory the Great.

GENERAL BUILDING NEWS.

WESLEYAN METHODIST CHURCH, ROTHERHAM.—On the 29th ult. the foundation-stone was laid of the Kimberworth Wesleyan new School-Chapel. The new building will be used for preaching services until the larger church is built, and the old chapel, in the meantime, will be renovated and adapted for the Sunday school. The present scheme consists of a central hall, 59 ft. long by 29 ft. wide, with classrooms opening direct into it on either side, having glazed screens between with lifting sashes. The infants' classroom is 23 ft. by 12 ft. 6 in., and is divided from the central hall by a folding glazed partition, the whole of which can be folded back, and the infants' room would then form a transept addition to the assembly hall. At the opposite corner there is a minister's vestry with lavatory, etc. In order to make use of the fall in the site, a basement is provided at the front, which consists of a church parlour, 18 ft. by 11 ft. 6 in., ladies' lavatory, also a kitchen, heating vault, and coal place. The style is fifteenth century Gothic. The accommodation is as follows:—Children, including the classrooms, about 480; or adults, excluding classrooms but including transept, about 300. Mr. J. E. Knight, of Rotherham, is the architect, and Mr. Richard Snell the builder.

WESLEYAN CHURCH, COLCHESTER.—The memorial stones of a new Wesleyan Church now in course of erection at the corner of Harsnett-road and Wimpole-lane, Colchester, were laid recently. The building, which is in the Gothic style, and will be adorned with a spire, is of red brick and stone, and is being constructed by Messrs. Dobson and Son, to the designs of Messrs. Goodey and Cressall, architects. It will provide seats for 500 persons, whilst the schoolroom will accommodate 250. The estimated cost of both buildings is 5,000*l*.

COTTAGE HOME, STYAL, WILMSLOW.—On the 28th ult. the additions to the cottage homes at Styal, near Wilmslow were opened. They will provide accommodation for another 120 children and officials. Mr. J. H. Broadbent (Manchester) was the architect. The cost of the work was 10,450*l*.

PARISH HALL, EASINGTON, DURHAM.—The corner stones of a new parish hall were laid at Easington recently. The total cost of the building amounts to about 1,300*l*. The architects are Messrs. Potts and Sons, Sunderland. The builder is Mr. Ramshaw, of Haswell. The building measures 68ft. by 26ft. and has a class-room 20ft. by 16ft. It will seat 300 persons.

WORKMEN'S CLUB, NEWSHAM, NORTHUMBERLAND.—The new premises which have been built by the New Delaval and Newsham Work-

men's Club, at Newsham, were opened recently. The building is of red bricks, with stone facings, and has been erected by Mr. William Redford, contractor, from plans prepared by Mr. John Goulding, architect, Blyth. The contract price amounted to 2,030*l.*

GRANGE U.F. CHURCH, GRANGEMOUTH, NEAR GLASGOW.—This new church, which was opened on the 29th ult. is a severe type of early English Gothic. The principal or longest front, in which is the main entrance, faces Grange Bank-road, along which it extends 126 ft. A square tower, about 70 ft. high, is placed at the north end of this front, and the principal entrance is at the base of this tower. The entrance doorway is deeply recessed, and has a moulded pointed archway leading into the vestibule. Internally the church is divided into nave and side aisles by the three pointed arches on each side. At the pulpit end an arch of wide span divides the church from the organ chamber, which is continued beyond the church. The ceiling is semi-octagonal in form, divided into bays by the main couples, and lined with dressed timber, which has been stained a dark oak shade. The church will seat over 630 persons, and the hall in connection is seated for 400 people. There are also a large session-room, vestry, etc. The total cost is expected to be about 4,000*l.* The architect is Mr. John B. Wilson, Glasgow.

CREMATORIUM FOR LEEDS.—It is proposed to erect a crematorium at Lawnswood cemetery, at Adel, Leeds. The plans have been prepared by Mr. W. S. Braithwaite, architect, of Leeds.

MASONIC HALL, BALLYMACARRETT, BELFAST.—A new masonic hall, Ballymacarett, Belfast, is now in course of erection. Messrs. Graeme-Watt and Tulloch are the architects. The total cost will be about 3,000*l.*

MISSION HALL, OTLEY.—A new Primitive Methodist Mission-hall in Leeds Road, Otley, has just been opened. The structure, which is of stone, will serve the purposes of a church and Sunday school. The main hall is 24 ft. by 35 ft. 6 in., vestry 12 ft. by 9 ft., and scullery 6ft. by 9 ft. The woodwork is of pitchpine, and the seating accommodation is for 150 people. Mr. Wall (Fairbank and Wall), Otley, is the architect.

GRANTHAM NURSES' HOME.—A new nurses' home has been erected at Grantham, in memory of the late Queen Victoria. The home is situate in Castle Gate, and the building has a frontage of 30 ft. to that street, with a depth of 80 ft. The south and west walls are treated in red brickwork, with Bath stone plinths and bands up to the chamber floor level, and above that with timber framing, filled in with rough cast plaster. On the west front there is a large octagon bay window in Bath stone, with moulded jambs and mullions, and above an overhanging gable, carried up in timber work and plaster and supported on wood brackets. To the right of the main entrance a lobby leads to the kitchens, and in front is a screen, with door leading to the hall. Off the hall is a small room intended for the reception of visitors, and further up is the nurses' sitting-room and the boardroom. A staircase leads to the upper rooms, consisting of four bedrooms and bathroom on the first floor, and two attics on the second. The contract has been carried out by Messrs. Rudd and Son, of Grantham, under the supervision of the architect, Mr. R. J. Girling, of Buckminster.

CLUB, MOSTON, LANCASHIRE.—A new building has been erected in Dean-lane by the Moston Conservative Club Company, Ltd. The building has been erected by Mr. T. H. Thomas, of Manchester, under the superintendence of Mr. E. W. Leeson, architect, whose designs were chosen in competition.

CHURCH, SALFORD.—The new Church of St. Ignatius, Salford, has just been consecrated. The building fronts Oxford-street, leading into Regent-street, and is bounded on the east and south by new streets recently made by the Corporation of Salford. The material is brick, with terra-cotta dressings, and the nave columns are of mottled red Runcorn stone. The east end is apsidal, and the columns of the arcading are of variegated serpentine, the circular-headed panels being filled with mosaics representing vases of lilies on a gold ground. The altar table and reredos are executed in oak, chestnut, walnut, and yew grown on the Tatton estate, and the picture of the Last Supper has been painted by the Hon. Mrs. Mitford, with gold background and other enrichments in gold. The altar cloth and frontal of silk, ornamented with white lilies and gold cross, have been embroidered by the Duchess of Buckingham and Chandos. A campanile is placed at the west, or Oxford-street, end. Opposite the west door is a recess containing a font of Caen stone with granite shaft. In addition to the usual church accommodation, a parish room is provided in the basement under the choir vestry and south transept, with separate entrance from the new street on the east side. The buildings throughout are supplied with electric light from the Corporation cables. This portion of the work has been executed by Messrs. F. W. Smith and Company, of Salford, and the terra-cotta is the work of Mr. Jabez Thompson, of Northwich. The church has been erected from the designs and under the superintendence of Messrs. Darbyshire and Smith, architects; and the whole of the work has been carried out under contract by Messrs. W. Brown and Son, contractors, of Salford. The actual cost of the structure and parish room, with its furniture, is about 9,461*l.*

HOSPITAL, LARNE, IRELAND.—The Smiley Cottage Hospital, Larne, has just been completed, and will soon be ready for occupation. The building has a frontage of 140 ft., and the central block has a depth of over 80 ft. All the outside walls are built hollow, the lower portion being faced with Belfast red perforated bricks, and the upper portion pebble dashed, with the gables in half-timber work. The roofs are covered with red Staffordshire tiles. The central block contains on the ground floor the boardroom, matron's room, nurses' dining-room, with kitchen, scullery, pantries, and storerooms. The wards for male and female patients, each of which is designed to accommodate six adults, are situated on each side of the central block, and at the extreme ends of the building and communicating with the wards are dayrooms, which are so designed that in case of emergency each will accommodate four additional beds, which brings the total accommodation of the ground floor up to twenty beds. In connexion with each ward, but cut off by corridors opening to the outer air, are bathrooms, etc. In the rear, and connected to the central hall by a short corridor, is the operating-room. On the first floor are three private wards, and five bedrooms for nurses and servants, with two sets of baths, etc., for patients and staff. In the rear of the building, and having a separate entrance from the yard, are a washhouse and laundry. A large drying-shed is also provided in the yard, and a shed for an ambulance carriage. The central hall is panelled in oak for a height of 8 ft. from the floor, which, with the floors of the corridors, is laid with oak parquet. The floors of the operating-room, bathrooms, etc., are laid with marble terrazzo, and all the other floors are of selected maple, wax polished. Almost the whole of the internal plaster work has been done in Keene's cement. The operating-room, which is top-lighted, has its walls covered with ivory white glazed tiles. The wards, dayrooms, operating-room, hall, and corridors are heated throughout with hot-water pipes and radiators on the low-pressure system. Open fireplaces are also provided in all rooms. The wards, etc., are ventilated by galvanised iron extraction tubes in the ceilings, connected to exhaust ventilators in the roofs, and Tobin's tube inlets in the walls. A small mortuary fitted up for post mortems is provided in a separate block at the rear of the site. The work has been executed by Mr. James Ferris, of Larne, while the sub-contractors engaged were: Heating, Messrs. Musgrave and Co., Ltd., of Belfast; ventilation, Messrs. Donald and Donald, of Glasgow; plumbing and gasfitting, Messrs. Kilpatrick and Son, of Paisley and Larne; parquet and terrazzo floors, Mr. J. F. Ebner, of London; stained and leaded glazing, Messrs. George Walton and Co., of Glasgow; wrought-iron gates and railing, Mr. George Jones, of Belfast. The whole of the work has been carried out from the designs and under the supervision of Mr. N. Fitzsimons, architect, of Belfast, with Mr. William Harpur as clerk of works.

PROPOSED NEW WESLEYAN CHURCH, MEXBOROUGH.—The Wesleyan Methodists of Mexborough are about to build a new church, and it is proposed to spend over 4,600*l.* on the scheme. A central site in Bank-street has been acquired, plans have been drawn up and approved, and the work will be put in hand at Christmas. The architects are Messrs. John Wills and Sons, of Derby and London, and the contract has been given to Messrs. C. Sprakes and Son, of Doncaster.

CLUB AND VILLAGE HALL, EMBLETON, NORTHUMBERLAND.—A club and village hall has been opened at Embleton, Northumberland. The building is constructed of local basalt whinstone, with Accrington red brick facings and rough cast gables. The west portion of the structure provides for separate clubs for men and women, having billiard-room, reading-rooms, library, and four rooms upstairs for caretaker. On the east of the club rooms is the large hall, 65 ft. by 27 ft., with stage 15 ft. by 27 ft., under which is a store for tables and stage apparatus. On either side of the platform are separate retiring-rooms for the ladies and gentlemen, which are so placed as to be also available for additional reading-rooms or committee-rooms for the men and women's clubs. The work has been carried out by Messrs. Elliot Bros., contractors, Preston, from the plans of Mr. J. Wightman Douglas, architect, Alnwick and Newcastle, whose designs were selected in competition.

LONDON BAPTIST ASSOCIATION CHURCH, STREATHAM.—This building occupies a corner site in Mitcham-lane. The portion of the church erected at present includes the nave and aisles, as far back as the transepts, galleries, tower and temporary apse, also two vestries which form a church parlour when the dividing folding partition is thrown back. The buildings are designed in a late period of Gothic, faced in red brick and stone dressings. The seating is circular on plan, in orham wood, wax finished; the pulpit is in oak and handsomely traceried and panelled. The accommodation provided is: On the ground floor, 270 adults, in gallery, 200 adults, total 470. In the complete scheme there will be 836 sittings, for a mixed congregation of about 1,000 persons. The architects are Messrs. George Baines, and R. Palmer Baines, London.

CHURCH, DALMUIR.—On the 29th ult. the new church which has been erected in Dumbarton-road, Dalmuir, was opened. The building will provide accommodation for 800 people. Mr. G. A. Paterson, of Glasgow, was the architect, and the total cost of the work is 5,000*l.*

WORKING CLASS DWELLINGS, ROTHERHITHE.—On the 31st ult. the foundation-stone was laid at Rotherhithe of a block of dwellings for the working-classes. The new tenements will provide for 980 persons. The design for their erection was thrown open to competition, and, on the adjudication of Mr. John Slater, that submitted by Messrs. Brocklesby, Marchant, and East was adopted. The estimated cost will be about 41,000*l.*, and the ground rents of the site will be about 2,800*l.* As planned, there will be twenty-five single rooms, 165 tenements of two, and forty-three of three rooms each. The builders are Messrs. W. Lawrence and Son, of Waltham.

METHODIST CHURCH, KINGSTOWN, DUBLIN.—The foundation-stones of a new Methodist Church have just been laid in Kingstown. Mr. G. F. Beckett, of Stephen's Green, is the architect of the new church, and the builders are Messrs. J. and P. Good, Limited.

PROPOSED ISOLATION HOSPITAL, BURSLEM.—Mr. R. J. Reece, M.D., an inspector of the Local Government Board, recently held an inquiry into the applications of the Burslem Town Council for sanction to borrow 13,000*l.* for the provision of an infectious diseases hospital, and 275*l* for the provision of a disinfecting station and apparatus. Mr. R. T. Longden, architect for the hospital, submitted and explained the plans of the proposed building. He stated that the site was situated three-quarters of a mile from the centre of the town, and the cost of the land, including a house, which would be converted into part of the administrative block, was 3,000*l.* He also explained that three diseases were proposed to be treated at the hospital—diptheria, scarlet fever, and typhoid fever—and the accommodation provided consisted of 40 beds, together with three convalescent wards. After Mr. Longden had explained the plans in detail, the Inspector suggested that for the purpose of providing more sleeping accommodation for the nurses, an additional story should be added to the administrative block.

MISCELLANEOUS.

INSPECTION OF DANGEROUS BUILDINGS, MANCHESTER.—At a meeting of the Improvement and Buildings Committee of the Manchester City Council on the 27th ult., the City Architect (Mr. H. Price) presented a Report on the inspection of property. In August last a Report was submitted on the collapse of certain property in Henry-street, Ancoats, by which two children were killed, and the subsequent verdict of the coroner's jury, in which the opinion was expressed that there had been negligence on the part of the Corporation Inspector of Dangerous Buildings. At present, it was stated, there is only one Inspector of Dangerous Buildings employed by the Corporation, whose duties covered the whole of the day. It was only possible for the Inspector to deal with properties to which his attention was called by the police or the sanitary department, and his time was so fully occupied that it was impossible for him to make anything like an inspection of any district with a view to the discovery of dangerous properties. During the last three months 330 reports had been received from various sources, necessitating 450 visits, or about six a day. There had been served also 244 preliminary notices as the result of these visits. Twenty-four notices under the Public Health Act were sent to various owners. Dangerous buildings required immediate and continued attention, until the source of danger was removed. The City Architect complained that this work, under the present arrangement, was inadequately performed, not on account of any failing on the part of the Inspector employed, but by reason of the large area covered and the increasing number of dangerous buildings. Building inspection, to be satisfactory, must be regular and frequent. Whatever arrangements, if any, were made by the Committee, each Inspector, the Report urges,

should in the first place be held responsible for his own district.

MEMORIAL TO QUEEN VICTORIA, CROYDON.—On October 27, the Princess Louise unveiled a memorial statue of Queen Victoria, which has been erected upon a site in front of the Town Hall and Municipal Buildings at a cost of nearly 1,000*l.* The fund, raised by public subscription, amounted to about 1,300*l.*, and the balance will be given to the Croydon General Hospital. The statue, executed by Mr. Williamson, of Esher, represents the Queen seated, wearing her crown and State robes, and holding the sceptre in her right hand.

PROPERTY IN KENSINGTON.—The sale is fixed for November 18 and 19 next of Lord Kensington's freehold property in the Earl's-court district, which at present yields in ground-rents an aggregate of about 2,500*l.* per annum, with reversions, beginning at Christmas, 1905, to rack rentals estimated at upwards of 40,000*l.* per annum. The sale extends to Edwardes-square and Pembroke-square, to the former of which belongs a beautiful garden extending over three acres. The projected destruction of that garden has aroused a considerable amount of public feeling, and, as recorded in our columns, has prompted certain steps taken by the London County Council. Other portions of the estate consist of a part of Kensington-crescent, and the terraces on the south side of the main road opposite Holland Park. The houses on the east side of Hornton-street, leading from High-street to the top of Campden-hill, are gradually being demolished for the building, by Messrs. C. A. Daw and Son, contractors, of a row of about twenty houses, after the plans and designs of, we understand, Mr. Frank S. Chesterton, for Sir Walter G. F. Phillimore, Bart.

FLOODING OF BASEMENTS OF HOUSES.—In connexion with this subject, the last four-weekly Report of Dr. Orme Dudfield, the Medical Officer of Health to the Borough of Kensington, contains the following remarks:—"In the morning of the 15th inst. there was a somewhat heavy rainfall at North Kensington, with the result that a considerable number of houses in St. Mark's-road and Silchester-road, in that district, were again flooded, shortly after six o'clock. The inundation was not to the same extent as on September 4, the depth of water above the flooring of the basements being only some three inches. But, of course, the usual unpleasant consequences were experienced, by the deposit of filth under the floors, so much more difficult to get rid of than filth on the surface. On the morning in question it was high water at London Bridge at 8 a.m., and therefore I assume that the storm water and sewage could not have been discharged direct into the river at Lot's-road, when the flooding happened, but would have to be lifted by the pumps. I understand that apparatus has been provided at the station for automatic signalling when the water in the Counter's Creek sewer attains a certain height, so that the pumps may be put in motion by, or without, the order of the engineer at the Western Pumping Station (1¼ miles distant) under whose direction the Lot's-road station has been placed. It would be interesting to know how many pumps were at work, and at what precise time pumping began? Obviously some time must elapse before the flood water can begin to make its appearance at Chelsea, and before that happens the mischief may have been done. It is beginning to be feared that the station will not be able to overtake the work for which it was built. Be this as it may, it is to be desired that the County Council should put in hand, as soon as practicable, the construction of the new main sewers designed for the purpose of preventing these terrible floodings. The plans, I believe, have long since been prepared, and, as I understand, approved. It might be well that the Council should communicate with the County Council on the subject."

"BRAINTREE CHURCH."—In the article on the above in our last, "the neighbouring town of Barking" should have been "the neighbouring town of Bocking."

A ROMAN VILLA IN GLOUCESTERSHIRE.—While searching for some Roman remains found by a farmer named Adey at Ifold, near Painswick, in 1868, but of which no details came to light or print, Mr. St. Clair Baddeley, of Rome, has laid bare a good mosaic pavement, and found a base, cap, and column of local stone, with mouldings of a superior type.—*Times.*

MEMORIAL WINDOW, YATE, GLOUCESTERSHIRE.—A stained-glass window, dedicated to the late Rev. G. L. Harvey, has just been placed in the parish church of St. Mary, Yate. The memorial has been executed by Messrs. J. Bell and Son, of Bristol.

LONDON WATER.—At Tuesday's meeting of the London County Council the Water Committee reported as follows:—"During the three months ended 30th September last 624 samples of water were taken by the chemist from the metropolitan water companies' mains, and 234 samples from the rivers Thames and Lee above the intakes of the water companies. The chemist has submitted to us his report on the results of the analysis and the microscopical and bacterial examination of the samples, and we find that the results clearly show that the filtered water supplied to consumers during the three months was generally inferior to that supplied during the corresponding period of last year, the quantity of nitrogenous organic matter present in the water being generally much greater. The character of the filtered water was on many days bacterially and microscopically of indifferent quality, and the chemist expresses the opinion that the water drawn from the mains of some of the companies was on several occasions undesirable for drinking purposes. As the water supplied by the Kent Waterworks Company during the latter part of August was found to be organically of an entirely different character to that usually supplied, thirteen special samples were collected from the mains of the company. The water was found to have a distinct colour, and although the total organic matter contained in it was not much greater than usual, the nitrogenous organic matter present was from one and a half times to five times as great. A careful consideration of the results leads to the belief that the water supplied by the company was more or less contaminated with water of a much inferior degree of purity. The chemist has also, at the request of the Metropolitan Water Board, examined a number of samples taken from the wells belonging to the Kent Waterworks Company. Seven out of thirteen samples were organically of the character and quality usually supplied by the company, while five others contained a little more nitrogenous organic matter, one of them having a remarkably high percentage of mineral matter present. The remaining sample was largely polluted owing to special circumstances. Our attention has been called to the analysis, by the public analyst of the Metropolitan Borough of Southwark, of samples taken from the mains of the Southwark and Vauxhall Water Company and the Lambeth Water Company on 14th and 15th September respectively. The amount of total organic matter present was not ascertained, but the results of the analysis of the samples in other respects are confirmed by those obtained in the Council's laboratory on the same day. It appears, however, that a much larger quantity of nitrogenous organic ammonia was present on several other days before and after the dates mentioned, and we would therefore point out that analyses made intermittently are of no use to the consumers as a check on the water supplied to them, and that a partial analysis is often misleading."

THE USHER HALL, EDINBURGH.—At a meeting of the Lord Provost's Committee of Edinburgh Town Council on the 21st ult., it was agreed, by ten votes to two, to approve of the recommendation of the Sub-Committee with regard to the preparing of plans for the erection of the Usher Hall. The recommendation was in favour of the plans being entrusted to Mr. Morham, the City Superintendent of Works, and his staff.

LEGAL.

EMPLOYERS' LIABILITY ACT.

HOW SHOULD THE WORKMEN BELOW BE PROTECTED?

AT the Brompton County Court, on October 30, before Judge Stonor and a jury, John Papworth, a joiner, 33, Archell-road, Fulham, S.W., brought an action, under the Employers' Liability Act, against the London Exhibitions Company, Ltd., Earl's Court, S.W., claiming 300*l.* in respect of personal injuries, said to have been sustained owing to negligence on the part of the defendants or their servants.

Mr. Arthur Page, counsel, appeared for the plaintiff, and Mr. J. W. Moyses, counsel, for the defendants.

The plaintiff stated that in March last he was in the employ of the defendants, assisting in the erection of the "Chop House" at the Earl's Court Exhibition. He had to take his orders from the foreman of the job, Proctor, who was under the leading hand, Smith. Two carpenters were working at the under portion of the gable roof, below which a level ceiling was to be formed—although the ceiling joists were not yet fixed—and underneath, on the floor, plaintiff and another man were working. For the men above to stand upon were two 7 in. by 2½ in. planks, laid side by side between two of the principals. These two men, it appeared, were shifting a plank, which fell and struck plaintiff with great force upon the lower part of the back and head. For two months he was in bed, and he was still attended by a doctor.

The plaintiff bore out counsel's opening statement. He added that he had had some fifteen years' experience in the trade, and maintained that, instead of having only two 7 in. planks to stand upon, the men above ought to have had a temporary floor of 3 ft. wide. This, he understood, was generally recognised in the building trade.

In cross-examination, plaintiff said that Proctor was a joiner like himself; but, at the same time, he had to obey Proctor's orders; and it was in accordance with the latter's orders that he was working below the two men at the roof. It was true that, since the accident, the defendants had offered him 2*l.* per week; but it was not a fact that he declined to take this money; he merely refused to sign any receipt or document whatever.

Re-examined: Smith took him to Proctor, and said that whatever Proctor told him to do he was to do.

John Henry Neal, a carpenter and joiner, working with the plaintiff at the time of the accident, corroborated as to the plaintiff and himself having to obey the orders of Proctor. Witness had been in the building trade for some fifteen years, and he maintained that the space to be occupied by the ceiling should have been temporarily "sheeted over" when men were working above and others beneath. He had complained to Proctor, before the accident occurred, about "the insufficiency of the scaffolding."

Cross-examined: He meant that the whole of the space between the principals where men were working should be sheeted in, under such circumstances as those in question. The usual way was to use scaffold boards to form the protection.

The Judge: Have you ever seen that done?—Witness: Yes, sir, on several jobs.

Counsel for the defence: I think one's common sense will say that cannot be so.

Charles Damerell, one of the carpenters who was working above, said that before he could catch hold of one end of the plank for the purpose of assisting in moving it, the man at the other end drew the plank along, so that witness's end slipped off the tie beam upon which it had been resting. The plank then fell and caused the accident. Witness had been in the trade for about forty-five years, and he considered that, on such a job, half of the ceiling should be temporarily sheeted in, or a floor, of four 9 in. boards laid side by side, provided for the men to work upon.

Cross-examined: The man who drew the plank and caused it to fall was a labourer, and the accident must have been due to that man's negligence.

Re-examined: If the ceiling had been sheeted in the accident could not have happened, even though the labourer had been negligent, as witness mentioned.

Mr. Christopher Richard Griffiths, surveyor, said he had had over thirty years' experience in the building trade. In his opinion, as an expert, it was not a reasonable and proper protection for the men working below for only two 7 in. planks to be provided for the men above to work upon. The staging for the men to stand upon ought to be, under such circumstances, 3 ft. wide at least, and the space occupied by the ceiling joists should be boarded over at the spot where the men worked. That was the usual way of carrying out such work.

Cross-examined: He did not mean that the whole of the ceiling should be temporarily boarded in, but only that portion over which men were working. He was not aware that on the job in question men were working upon all parts of the floor; but, if it were so, he maintained that all the ceiling should have been temporarily covered in.

The Judge: But I understand that these boards were required to be moved about from time to time, and in carrying them about a careless workman might let one fall.

Witness: I say that they should not be moved about if men are working underneath.

Medical evidence having been given regarding the plaintiff's injuries,

Counsel for the defence said that, although he had several witnesses, he did not consider it necessary to call any evidence after the admission of the witness Damerell that the accident was caused through the negligence of the labourer, in pulling the plank away from the tie beam before the other man had time to catch hold of the end.

The Judge: That is not the point at all, and has nothing to do with the issue before us. Their case is that the ceiling should be boarded in when men are working beneath, and that the boards should not be shifted when the men are immediately below. The question is whether the whole mode of working in this instance was safe and proper.

Counsel for the defence: I submit that, if the whole of the ceiling had to be boarded in, and the men below told to go away whenever a board was being moved, work of this kind could not possibly be carried on. The men working below would constantly have to be told to knock off for five minutes or so; and if employers have to foresee, and provide against, carelessness like this labourer's—well, Heaven help them.

The Judge said there was only one question

for him to put to the jury, namely, whether the mode of working, as described, was a safe mode of working or not.

The jury found that the mode of working was not safe, and they assessed the damages in the plaintiff's favour at 150*l.*

His Honour gave judgment accordingly, and allowed full costs. His Honour added that it appeared to him very doubtful whether the plaintiff would not have done better by accepting 1*l.* per week during such time as he might be incapacitated.

BUILDING BY-LAWS.

Summonses under the Levenshulme Urban District Council by-laws were heard at the Manchester County Police-court on the 27th ult. In the first case the defendant was Mrs. Guthrie, who was summoned for occupying a house in Marshall-road, Levenshulme, before obtaining the surveyor's certificate as to its fitness for habitation.

The Clerk to the Council, Mr. J. Ogden Hardicker, explained that building in the district was going on so rapidly that there was a tendency on the part of the builders to allow their houses to be occupied before they were inspected.

Mr. Clayton, on behalf of the defendant, admitted a technical offence, and the Stipendiary, remarking that she had broken a very important by-law, imposed a fine of 40s. and costs.

A similar penalty was imposed upon Fanny Radcliffe for "letting" three cottages, Nos. 5, 7, and 9, Lostock-street, Levenshulme, without having first received the necessary certificate. In this case, when the inspector visited the houses he found that the tenants had not then received a water supply.

The Stipendiary remarked that the bench had had great hesitation as to whether they ought not to have inflicted the full penalty in each of the cases. In future they would do so.—*Manchester Courier.*

ACTION ON A COVENANT.

In the King's Bench Division, on Friday, the 30th ult., Mr. Justice Darling and a Common jury had before them the case of Hearne *v.* Havinden,—an action by Mr. J. F. Hearne, of 55, Kenilworth Road, St. Leonards-on-Sea, against Mr. Gustavus Edward Havinden, of 73, Tonbridge Road, Maidstone, to recover 58*l.* 19*s.* 9*d.*, as damages in respect of an alleged breach of agreement. The defendant denied liability.

Mr. Humphreys appeared for the plaintiff, and Mr. Redmond for the defendant.

It appeared that on November 1st, 1901, the plaintiff agreed to let, and the defendant to take, No. 75, Tonbridge Road, Maidstone, for a period of 8 years, subject to the condition that the defendant should pay all "charges and impositions" except the landlord's property tax. On July 3rd, 1902, plaintiff was served with a notice by the Maidstone Urban District Council, under the Public Health Act, informing him that a nuisance existed on the Tonbridge Road premises, and requiring him to abate it within three days. For that purpose the drains had to be cleaned; thereupon the plaintiff requested the Maidstone Urban District Council to do the work for which he paid the sum now claimed. His contention was that under his agreement he was entitled to look to the defendant for repayment of the amount.

The defendant denied that he was liable to pay for the repairs, contending that the landlord had covenanted to repair all the outside parts of the premises. He further stated that the expenditure necessary to comply with the order of the Urban District Council should not have exceeded 10*l.*, but in order permanently to improve the property the plaintiff voluntarily instructed the Sanitary Authority to execute expensive alterations beyond what were required.

In reply it was argued by the plaintiff's Counsel that the expense incurred was in the nature of an imposition which defendant had contracted to pay.

His Lordship said that on his construction of the agreement it was the duty of the landlord to keep the drain in repair, it being an outside matter. His decision was in favour of the defendant, and there was no question to leave to the jury.

The action was accordingly dismissed, with costs.

BUILDER'S LIBEL ACTION.

In the King's Bench Division, on the 30th ult., the hearing of the case of Day *v.* May and Wife was concluded before Mr. Justice Jelf and a Common Jury,—an action by the plaintiff, a builder, carrying on business in Finchley, to recover from the defendants' damages for alleged libel.

Mr. George Elliott and Mr. Finch appeared for the plaintiff, and Mr. Bonsey for the defendants.

Mr. Finch, in opening the case, said plaintiff had built several houses in Ballard's Lane, North Finchley, and in May, 1902, Mrs. May, one of the defendants, bought from the plaintiff a house called "Greystones." Prior to the sale, viz., in March, 1902, the plaintiff wrote to the defendants that the drainage had been carried out in accordance with the requirement of the Local Board. The defendants having gone into possession in May, in the following October exhibited a board in the garden on which was as follows: "The drains of this house have been condemned, and are being entirely reconstructed by H. Plumber, of 36, Litchfield Grove." This was the libel complained of, the plaintiff alleging that the statement was entirely untrue, the drains not having been condemned, but passed by the Sanitary Authority. The plaintiff said that the only thing wrong with the drains was that a little cement had bulged in the insides of some of the joints, which was easily remedied, and the drain worked well. He alleged that the putting up the board caused him great injury.

Mr. Bonsey, on behalf of the defendants, contended that there was no libel, the word "condemned" meaning merely that the drains had been disapproved of, which was the fact. When Mrs. May bought the house she did so upon the plaintiff's warranty that the drains had been carried out in every detail in accordance with the requirements of the Local Board. The drains had not been laid in accordance with the by-laws and were defective, and defendants counter-claimed the expenses of putting them in order.

In the result the Jury, in answer to questions left to them by the learned Judge, found that the words complained of were a libel, and were untrue, and assessed the damages at 10*l.* They also found that the letters written by the plaintiff to the defendants on March 11th and 26th, 1902, were not intended to be a warranty.

On these findings judgment was entered for the plaintiff as against Mr. May on the claim and for the plaintiff on the counter-claim as against both defendants, with costs.

Judgment was entered for the female defendant on the claim.

SETTLEMENT OF THE STRAND ANCIENT LIGHT CASE.

The case of the Hotel Cecil, Ltd., *v.* the Savoy Hotel, Ltd., was in the list for hearing before Mr. Justice Farwell in the Chancery Division on the 3rd inst., the action brought by the plaintiffs for an injunction to restrain defendants from erecting their new buildings to such a height as to materially obstruct the plaintiffs' ancient lights.

When the case was called on, however, counsel stated that the parties had come to terms.

His Lordship said, that being so, he would make an order restraining all further proceedings in the action, upon terms to be agreed upon and signed by the parties.

PAVING APPORTIONMENT DISPUTE.

The hearing of the case of Kendal *v.* Mayor, etc., of Lewisham, concluded in the Court of Appeal, composed of Lords Justices Vaughan Williams, Romer, and Stirling, on the 4th inst., on the appeal of the plaintiff from an order of Mr. Justice Kekewich in the Chancery Division.

The action was brought by the plaintiff for a declaration that an order dated July 3, 1901, made by the defendants, charging and assessing the occupiers of houses belonging to the plaintiff situate in Montem-road, Forest Hill, with a proportionate part of the estimated cost or expenses of paving of part of the road, was invalid, and an injunction to restrain the defendants from continuing to require the tenants of the plaintiff in the road to pay the rents of their tenements respectively to the defendants in respect of such charge, an account of all moneys received by the defendants from such tenants, payment of the sum so received by the defendants, and damages.

The plaintiff's case was that he owned seventeen houses in the Montem-road. On May 8, 1901, the Council passed a resolution that the office of Surveyor to the late Lewisham District Board of Works should be abolished as from the prior March 25. On May 15 an estimate and apportionment of the cost of paving Mortem-road was prepared by Mr. Van Putten, the Assistant Surveyor to the Board. He estimated the cost at 805*l.* 15*s.*, and his apportionment in respect of plaintiff's houses was 485*l.* 7*s.* The Council resolved that the road should be paved and the expenses apportioned, and that proceedings should be taken for collecting and receiving the amount. The work was put out to tender, and a tender of 646*l.* was accepted, and the work duly executed. In July, 1901, the Council served on the plaintiff's agent a notice requiring payment of the sum of 485*l.* 7*s.*, and on November 30, 1901, the Town Clerk of the Council served on the plaintiff's tenants notices under Section 96 of the Metropolis Management Act, 1862, requiring the tenants to pay to the Council the amount so apportioned, and not to pay their landlord any rent without first deducting the said sums respectively. Down to October, 1902, the Council had collected from the tenants nearly the whole of the amount so apportioned, but no proceedings were instituted by the Council against the tenants. Plaintiff contended that the Order of July 3, 1901, was invalid, (1) because the estimated expenses of paving Montem-road were determined at a time when Mr. Van Putten was not Surveyor to the Council within the meaning of Section 105 of the Metropolis Management Act, 1855; and (2) because the amount apportioned included not only the expenses of paving, but also the expenses of drains and gullies, and of paving work in the Brockley Park-road, which were not ordered to be done by the Council. Plaintiff further contended that the Council had no right to collect the cost and expenses from his tenants, and alternatively that even if the order of July was valid, defendants could not require the payment of the costs apportioned from the tenants until the same had been recovered by legal proceedings.

The defendants denied that they had acted wrongfully in collecting the costs and expenses of the work, or that any of their acts in respect of the matters complained of had been wrongful or invalid. Mr. Justice Kekewich decided the case in favour of the defendants, and gave judgment for them with costs. Hence the present appeal of the plaintiff.

Mr. Arthur Powell, K.C., and Mr. Woods appeared as counsel for the appellant; and Mr. Macmorran, K.C., Mr. Hoare Avory, K.C., and Mr. Poyen for the respondents.

After the arguments had proceeded some time, Lord Justice Vaughan Williams suggested that the parties should endeavour to come to terms. He said it was a pity that so much money should be spent in fighting such a point, the amount involved being a small one. His Lordship asked if the defendants were willing to account to the plaintiff for all moneys received from the tenants?

Mr. Macmorran replied that defendants had always been ready and willing to do that.

After a long consultation between the counsel engaged, it was stated that the parties had come to terms on every point except as to the costs.

Lord Justice Vaughan Williams suggested that the parties should leave the question of costs to the Court, after the Court had heard arguments from the learned counsel on both sides on the point.

Mr. Powell and Mr. Macmorran then addressed their Lordships on the question of costs on behalf of their respective clients.

In the result, Lord Justice Vaughan Williams said that in the opinion of the Court no order ought to be made as to costs, except that the local authority should pay 75*l.* The previous order would be discharged on the terms initiated by counsel, liberty being given to either side to apply.

PATENTS OF THE WEEK.

APPLICATIONS PUBLISHED.*

26,543 of 1902.—J. C. W. Herschel: *Hinges.* The object of this invention is to construct hinges for cabinets, furniture, etc., in such a manner that the strain due to the weight of the door, etc., is met, and the tendency of the screws to loosen is overcome. According to the invention the hinge is formed with four plates which are pivoted upon a common pin, either all independently or in the form of two angle plates. The screw holes in the said plates are arranged so that the screws will miss each other, crossing at right angles or thereabouts, the plates being fastened in place in pairs on the two faces of the corners of the standing and swinging parts of the structure. It will thus be seen that in every position of the swinging part there are always a sufficient number of screws which sustain the strain transversely through one pair of opposite plates, in addition to and aided by the screws in the other pair of plates, which receive the longitudinal strain, thereby securing the greatest possible fixity of attachment and resistance to the leverage and rocking strain of the door, lid, valve, bookshelf, or the like as it swings.

17,330 of 1903.—T. V. Hampton: *Tool for Use in Gauging and Marking-off Carpenters' Work.*

This relates to a compound baffle and square, the object being to provide a tool particularly adapted for use for carpenters, ship builders, and millwrights, by means of which they can accurately gauge the length of a piece of timber or spouting to be cut, and also gauge the angle upon which the ends are to be cut, thereby making accurate joints and avoiding misfits. The tool consists of four bevel squares or bevel

* All these Applications are in the stage in which opposition to the grant of Patents upon them can be made.

blades, each carried by a stock. The stocks are arranged in pairs hinged together, and each pair connected by means of adjustable or extensible connecting rods.

28,494 of 1903.—J. BRODIE and F. PRIOR: *Kitchen or Cooking Ranges.*

This relates to kitchen or cooking ranges, and consists in making the bottom of the firebox with separate firebars, to obviate the necessity for renewing the bottom when the bars wear out. Improved means are provided for lifting or lowering the bottom when required to regulate the capacity of the firebox, and also for changing the range into a slow combustion grate by means of a hinged plate fitting under the box. There is also provided an ash sifter, and at each side of the fire toast plates. The invention also consists of an improved oven, constructed in several parts or divisions, and so arranged that one or more parts can be opened without interfering with the remainder.

27,334 of 1902.—H. T. STEPHENS: *Gates and the like.*

In a gate or the like, the combination with a gate post of a shoe with a closed base to receive the end of such post, and one or more projecting collars on such shoe to receive the end of the horizontal rail and the diagonal rails, if any.

27,528 of 1902.—THE GUNN CASTOR CO., Ltd., and L. R. PIERCY: *Swing Looking-glasses, Fanlights, and the like.*

Pivot fittings for swing looking-glasses, fanlights, and the like, in which opposed friction elements of the pivot are drawn together laterally, for automatically stiffening the joint and taking up wear, by the relative movement of a surface on one of the parts of the fitting and inclines or tapering or wedge-like surfaces on another part, under the influence of the weight of the suspended glass or the like to which one of the said parts is attached.

27,834 of 1902.—A. BEX: *Brackets and Supports for Shop Window and like Fittings.*

In brackets or supports for shop window and like fittings, a standard or support provided with a series of half round holes or notches, in one of which rests a pin carried by one arm of a bracket, a second arm on said bracket embracing the other side of the standard and being provided with a locking device, so that when placed on said standard the bracket may be fixed thereto, so as to prevent the accidental displacement of the bracket.

16,763 of 1903.—G. H. STOUT and L. A. TURNER: *Gravity Locks.*

A lock, consisting in the combination with a bottom pivoted gravitating bolt, two independently movable tumblers therefor both accessible to a key from opposite sides of the lock, a central partition separating said tumblers and perforated to give access to a key from either side of the lock at the place of the division of said tumblers, and an independently movable latch for said bolt, accessible to a key from only one side of the lock.

25,525 of 1902.—A. P. TOWL: *Adjustable Bracket for Shelves or other Purposes.*

This relates to a frictional device for attaching a bracket or shelf to a standard in which the bracket or shelf is supported on the overhanging end of a grip-plate which is so shaped as to embrace a part or the whole of the section of the standard with an approximate fit, and which is so connected to the bracket or shelf that it can tilt relatively thereto.

25,557 of 1902.—O. RUHL: *Method of or Means for Producing an Initial Tension in Metal Skeletons for Building Purposes.*

This relates to a method for producing an initial tension in wire skeletons for strengthened concrete constructions, etc., characterised by intermediate supports placed in a lying-down position, whilst a webbing of metal wires is wound thereon or arranged also in a lying-down position and guided upon one side of the aforesaid webbing, and afterwards turned up endwise, thus giving to the metal wires the required tension and direction.

26,102 of 1902.—J. H. BUTTERWORTH: *Apparatus for Humidifying Air.*

This relates to an apparatus for humidifying air, comprising essentially a ventilating tube through which a current of air is mechanically propelled, a chamber into which air is forced or drawn through an adjustable inlet, a water pulveriser or similar apparatus situated in said chamber for dividing a jet of water into minute particles and spreading these, a vaporiser consisting of a coil or vessel heated by steam or other means and situated in the said chamber, and means for spreading the humidified air and causing it to unite with propelled dry air which does not pass through the said chamber, so that dry and humidified air pass together outwards into the room.

23,272 of 1902.—T. W. JOHNSON: *Casks, Barrels, and the like Vessels.*

This relates to casks, barrels, and the like vessels, and consists in the combination with a head abutting against the stave for the whole or greater part of the width of the head, of a jointing fillet or ring inserted between the abutting faces and projecting into the surfaces thereof.

21,315 of 1902.—E. JACK: *Appliances for enabling Sash Windows to be Opened Inwards.*

This relates to the arrangement or application of appliances consisting of divided hinges with slots in the socket part to permit of its being moved so as to engage with the pivot part and support the sash, and of its being withdrawn after being disengaged from the pivot, so as not to prevent or interfere with the raising or lowering of the sash in the ordinary way.

9,261 of 1903.—C. T. SMITH: *Register and other Stoves.*

This relates to register and other stoves, consisting in the employment of the front bar so arranged in combination with the side cheeks and sole plate or stove bottom that said front bar can be turned up into a vertical position at the front of the stove breast to be turned into a horizontal or nearly horizontal position to form a shelf or trivet, or be slided back underneath the sole plate or bottom of the stove breast, means being provided for supporting the front bar in any of the said three positions.

26,495 of 1902.—J. PLACE AND SON and W. H. PLACE: *Waste Water-closet.*

This relates to a waste water-closet, a tipper-box, and outlet or down shaft made in one piece, continued to the surface by a double or combined rising pipe.

13,231 of 1903.—F. LAMING: *Arrangement for Locking or Unlocking a Number of Doors Simultaneously.*

This relates to an arrangement for locking or unlocking a number of doors simultaneously, comprising a number of electro-magnets, each of which is secured upon the frame of a door or the like, and which may be energised in any suitable manner from a more or less remote point, and a bolt adapted to be acted upon by the magnet and withdrawn from a socket, permitting the door to be opened.

18,923 of 1903.—T. FRANKE: *Iron or the like Girders for Insertion in Concrete Constructions.*

This relates to girders for concrete constructions, in which the web or vertical middle part is formed with corrugations or indulations perpendicularly to the longitudinal direction of the girder, and the corrugations or indulations increase in diameter from the bottom to the upper edge of the web.

18,947 of 1903.—C. E. LINCOLN: *Planes.*

This relates to bench planes, and has for its object a plane which upon its return or idle stroke will automatically lift the cutting blade sufficiently above the under surface of the plane so that the cutting blade will not scrape along the wood being planed, which, as is well known, dulls the edge of the cutting blade. A further object is the provision of means whereby the cutting blade and its support may be held in a raised position for the purpose of fixedly securing the cutting edge of the blade sufficiently above the under face of the plane in order that the latter may be stored away either in a chest or in a tool cabinet, thereby preventing any damage being done to the cutting edge of the blade should the blade be in contact with any other object. The invention may be said to broadly consist of a supporting medium for a cutting blade, which supporting medium at its one end is suitably pivoted to the plane stock and its other end supports the cutting blade, a spring being interposed between the underside of the supporting medium and the plane bottom, this spring normally retaining the supporting medium in an elevated position, but possessing sufficient resiliency to enable it to be readily depressed, whereby the cutting edge of the blade may be projected sufficiently within the plane mouth to enable a shaving to be taken off the object planed, when sufficient force or pressure is applied to the handle in order to propel the plane during its cutting stroke.

19,218 of 1903.—W. J. GIBSON: *Grate or Fireplace.*

This relates to a grate or fireplace, consisting of a horizontal adjustable ventilator arranged immediately at the front edge of the fire over a casing or pan built into or resting on the hearth.

18,805 of 1903.—H. V. BAILEY: *Cupboard and like Turns.*

This relates to cupboard and like turns or fasteners, and consists in locking the adjustable tongue to the spindle through the medium of a washer or plate which is capable of sliding without relative rotation upon the spindle and is provided with a tooth or projection adapted to engage with the screwed-on tongue and prevent same from rotating; the said parts being retained in such engagement by a lock nut.

25,075 of 1902.—W. INGHAM, B. LANGTON, and L. INGHAM: *Kiln for Burning Pipes, Bricks, and the like.*

A kiln, comprising a chamber with a combustion flue at each side thereof, fitted with grate bars arranged the length of such flues within the said chamber, and walls abutting to keep the fuel on the grate bars, and to form the combustion flues.

26,627 of 1902.—J. GORDON and D. B. DOBSON: *Method of Constructing Stairs, Staircases, and Landings, for Mixed Schools.*

An arrangement of stairs, staircases, landings, and gangways, for boys and girls, which in mixed schools will enable them to ascend and descend, and to enter the same classrooms on upper floors, without mixing, or coming in contact, the one with the other.

26,683 of 1902.—R. W. JAMES (Dr. H. Passow): *Manufacture of Cement.*

A cement consisting of a mixture of artificial or furnace slag, containing not less than 38 per cent. of lime, granulated and dried or air granulated so as to be quickly cooled, with from 5 per cent. to 15 per cent. of clinkered Portland cement.

26,945 of 1902.—A. W. COOKSEY: *Sound and Fire-proof Flooring.*

This invention relates to that description of flooring which usually consists of steel or iron joists supporting arches or slabs of concrete or other fireproof material on or in which wooden joists or fillets are laid or embedded to receive the floor boards. The object of this invention is to cheapen and simplify the construction of such floors, to improve the ventilation thereof, to render them less conductive of sound and less liable to decay. According to the invention, the floor joists or fillets are constructed of concrete, which may consist of a mixture of coke-breeze, sawdust, and lime or cement, for example. They may be moulded in one with the before-mentioned arches or slabs, or in some cases they may be made in separate lengths and laid or bedded on the said arches or slabs, or may be nailed or spiked thereto. They may be of any convenient section, but it is preferred to form them of a trapezoidal section, their bases being broader than their top surfaces, which receive the floor boards. They may be made continuous, with transverse openings or holes at intervals for the purpose of ventilation and for the passage of pipes, wires, or the like. Or they may be made plain and discontinuous and of any convenient length, the gaps between the ends of every two such lengths being filled in by a separate short length of similar section with a hole or recess of semi-circular or other shape formed therein for the above-described purposes. The adjacent ends of the lengths of joist may be made of any convenient shape, so that they fit or lock together, or they may be made at a similar angle to that of their sides and so that they may be nailed or spiked to one another. The floor boards are nailed or otherwise fixed to the top surfaces of the concrete joists, with or without the intervention of strips of felt or the like to form a bed and to further assist in deadening sound.

9,508 of 1903.—G. LILIENTHAL: *Artificial Marble for Covering Walls, Floors, and the like.*

A process for the production of a surface resembling marble, consisting in applying to a wall or floor a mass of cement mortar of dough-like consistency, mixed with the requisite colouring additions, and spreading the mass by rolling, thereby expressing any air which may have become enclosed in the mortar.

9,509 of 1903.—G. LILIENTHAL: *Method of Securing Wooden Flooring Boards to a Concrete or Stone Foundation.*

A process for securing wooden boards on to stone-like bases in which the boards are roughened or grooved on the lower surface, and cemented to the stone-like basis by a cement material in which cords are embedded at intervals.

MEETINGS.

MONDAY, NOVEMBER 9.

Surveyors' Institution.—The President, Mr. Albert Buck, will deliver the opening address of the new session. 8 p.m.

Incorporated Clerks of Works' Association (Carpenters' Hall).—Paper by Mr. John Davies on "The Carpenter: His Tools and His Work in the Past and Present." 8 p.m.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. J. E. Worth on "Scavenging—Disposal of House Refuse." 7 p.m.

TUESDAY, NOVEMBER 10.

Institution of Civil Engineers.—Professor W. C. Unwin, B.Sc., F.R.S., on "Tensile Tests of Mild Steel, and

the Relation of Elongation to the Size of the Test-Bar.' 8 p.m.

Institute of Sanitary Engineers, Ltd. (Lectures in Practical Sanitary Science).—Mr. J. T. Griffin on "Sewerage." 7 p.m.

Architectural Association Camera and Cycling Club.—Mr. F. R. Taylor will deliver his Presidential Address, after which Mr. C. H. Oakden, F.R.P.S., will deliver a lecture on "Little Known Irish Abbeys," illustrated with numerous lantern slides (deferred from October 14th). 7.30 p.m.

WEDNESDAY, NOVEMBER 11.

Sanitary Institute (Lectures for Sanitary Officers).—7 p.m.

Edinburgh Architectural Association (Associates' Section).—Mr. Ramsay Traquair on "Later Scotch Gothic."

Northern Architectural Association.—Opening meeting of the winter session. The President, Mr. J. Walton Taylor, will deliver his inaugural address.

FRIDAY, NOVEMBER 13.

Sanitary Institute (Lectures for Sanitary Officers).—7 p.m.

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

October 22.—LONG & SONS (at Feltham).

Feltham, Middlesex.—Victoria-rd., a freehold building estate, 4 a. 0 r. 12 p. £1,000

G. NICHOLS, HOWES & CO. (at Bristol).

Warmley, Glos.—Mound's Court Farm, 102 a. 3 r. 23 p., f. (in lots) 3,350
Two freehold enclosures, 15 a. 2 r. 6 p. 800
Pucklechurch, Glos.—Dodd's Farm, 64 a. 1 r. 38 p., f. 2,760
Two freehold enclosures 35 a. 1 r. 1 p. 2,000

BAXTER, PAYNE & LEPPER (at Bromley).

Bromley, Kent.—London-rd., Leyland House and building site adjoining, part f. and part u.t., 88 yrs., g.r. 15*l.* 15*s.*, y.r. 90*l.* 950

October 23.—FRANKLIN, GALE & NEWTON (at Wallingford).

Sotwell, Berks.—Two freehold orchards with farm buildings, 16 a. 1 r. 16 p. 1,600
Gore Furlong, &c., enclosures, 53 a. 2 r. 1 p., f. 1,200
White Post Field, allotment, 9 a. 2 r. 28 p., f. ... 150
Four freehold enclosures, 15 a. 1 r. 18 p. 200
New Meadow, 5 a. 3 r. 13 p., f. 120

October 26.—BRODIE, TIMBS & CO.

Finchley.—Crescent-rd., Ashleigh, and 1 a., f., p 1,600

DYER, SON & HILTON.

Blackheath.—Westcombe Park-rd., Parkhurst, f., y.r. 65*l.* 850

MAY & PHILPOT.

Streatham.—28, Streatham Hill-rd., u.t. 29 yrs., g.r. 42*l.* 10*s.*, p. 1,250

R. & J. R. MITCHELL (at Cockermouth).

Uldale, Cumberland.—Uldale Hall Estate, 200 a. 2 r. 30 p., f. 7,000
Seven freehold messuages 335
Three freehold closes, 9 a. 3 r. 15 p. 655
Gate Farm, 81 a. 0 r. 3 p., f. 2,000

PROTHEROE & MORRIS (on the estate).

Shenfield, Essex.—Hutton-rd., two freehold building sites 500
Hutton-rd., a freehold building site with enclosure of woodland, 33 a. 875

October 27.—C. RAWLEY CROSS & CO.

Acton.—High-st., a freehold corner site 450
Kensington.—110 and 112, Princes-rd. (S.), f., e.r. 113*l.* 1,450
Shepherd's Bush.—57 and 71, Wood-la., u.t. 71 yrs., g.r. 16*l.*, y.r. 95*l.* 930

DEBENHAM, TEWSON & CO.

Euston-rd.—Nos. 370 and 372; also 9, 10, 11, and 12, Diana-pl. (manufacturing premises, &c.), area 39,000 ft., f., y.r. 930*l.* 26,000

FIELD & SONS.

Fleet Street.—Johnson's-ct., f.g.r. 13*l.*, reversion in 30 yrs. 910
Hampstead.—Iverson-rd., f.g.r. 24*l.*, reversion in 76 yrs. 600
Battersea.—Queen's-rd., f.g.r. 10*l.* 10*s.*, reversion in 71 yrs. 265
Robertson-st., f.g.r. 21*l.*, reversion in 71 yrs. ... 555

MAPLE & CO.

Regent's Park.—3, Gloucester-rd., and 3, Queen's-mews, f., y.r. 121*l.* 2,000

FREDERICK WARMAN.

Camden Town.—10, Eversholt-st. (S.), u.t. 39¼ yrs., g.r. 7*l.*, e.r. 70*l.* 530
Stamford Hill.—76c, Amhurst-pk., u.t. 89 yrs., g.r. 10*l.*, e.r. 70*l.* 500
Stroud Green.—31, Mount View-rd., u.t. 78 yrs., g.r. 9*l.* 10*s.*, e.r. 65*l.* 570

ALFRED RICHARDS (at Enfield).

Enfield.—2, Essex-rd., f., p. 800

October 28.—JOHN DAVEY & CO.

Old Charlton, Kent.—21 and 23, Delafield-rd., u.t. 64 yrs., g.r. 6*l.*, y.r. 75*l.* 8*s.* 500

DRYSDALE, NURSE & CO.

Stoke Newington.—31, Cazenove-rd., u.t. 70 yrs., g.r. 9*l.*, e.r. 60*l.* 670
Clapton.—15, Southwold-rd., u.t. 50 yrs., g.r. 6*l.* 10*s.*, e.r. 33*l.* 300

MARK LIELL & SON.

Barking, Essex.—1 to 16, Barking-pl., f., w.r. 197*l.* 12*s.* 980
Poplar.—38, St. Leonard's-rd. (S.), f., y.r. 59*l.* 5*s.* 530
Plaistow.—2 and 4, Ethel-rd., u.t. 74 yrs., g.r. 8*l.*, w.r. 55*l.* 18*s.* 300
Bromley.—240 and 242, St. Leonard's-rd. (S.), u.t. 62 yrs. g.r. 9*l.*, w.r. 89*l.* 14*s.* 375
St. George's, East.—33, Cable-st., and 2, Back Church-la., u.t. 56 yrs., g.r. 15*l.*, y.r. 75*l.* 730
Wanstead.—Blake Hall-rd., Lake Cottage, u.t. 35 yrs., g.r. 2*l.* 13*s.* 4*d.*, y.r. 35*l.* 295

NICHOLAS, DENYER & CO.

Ifield, Sussex.—The Ifield Court Estate, 286 a 3 r. 10 p., f. 10,000

Great Missenden, Bucks.—Springfield Lodge and Stud Farm, 45 a. 3 r. 29 p., f., p. 3,250

NOKES & NOKES.

Walthamstow.—St. Mary's-rd., f.g.r. 12*l.*, reversion in 83½ yrs. 236
Canning Town.—87 to 109 (odd), Garvery-rd., u.t. 71 yrs., g.r. 57*l.* 15*s.*, w.r. 214*l.* 10*s.* 590

J. S. RICHARDSON.

Bermondsey.—11 and 12, Frean-st., u.t. 12½ yrs., g.r. 6*l.*, w.r. 61*l.* 2*s.* 200
Rotherhithe.—11, Union-rd., u.t. 42½ yrs., g.r. 6*l.*, y.r. 40*l.* 390

R. TIDEY & SON.

De Beauvoir Town.—104, 106, 108, 118 and 120, Southgate-rd., u.t. 16 yrs., g.r. 20*l.*, y.r. 194*l.* 36 and 38, Culford-rd., u.t. 28 yrs., g.r. 8*l.* 15*s.*, y.r. 66*l.* 1,215
Haggerston.—80, Phillipp-st., f., w.r. 36*l.* 8*s.* 550

F. G. WHEATLEY & SON.

Bromley-by-Bow.—1 to 8, Thomas-pl., f., w.r. 155*l.* 7*s.* 385
38, 40 and 42, Byron-st., f., w.r. 74*l.* 2*s.* 1,500
Manor Park.—Romford-rd., f.g.r. 7*l.*, reversion in 87 yrs. 840
Brixton.—Crawshay-rd., f.g.r. 10*l.*, reversion in 60 yrs. 220
Stratford.—Vicarage-la., f.g.r. 40*l.*, reversion in 73 yrs 255
Ealing.—6 and 8, Northfield-la. (S.), u.t. 97½ yrs., g.r. 15*l.* 16*s.*, y.r. 80*l.* 990

October 29.—BRACKETT & SONS.

Tunbridge Wells, Kent.—Sandrock-rd., Shrublands, and 2 a. 0 r. 20 p., f., y.r. 240*l.* 5,500

BROWETT & TAYLOR.

Tottenham.—70, 72 and 74, Greyhound-rd., f., w.r. 101*l.* 8*s.* 960

A. & G. GUIVER.

Edmonton.—Hertford-rd., a freehold house with blacksmith's shop, yards, and 3 cottages in rear, w.r. 71*l.* 10*s.* 755
Ponders End.—Orchard-rd., The Eureka Refreshment House, with stabling, &c., f., y.r. 60*l.* ... 1,150

HUNTER & HUNTER.

Paddington.—13, Chichester-rd., u.t. 45 yrs., g.r. 8*l.* 10*s.*, y.r. 45*l.* 350
45, Westbourne Park Cres., u.t. 55½ yrs., g.r. 8*l.*, y.r. 45*l.* 445
Notting Hill.—14, St. George's-rd. (S.), u.t. 57½ yrs., g.r. 7*l.*, y.r. 30*l.* 225

MABBETT & EDGE.

Shoreditch.—10, Church-st. (S.), f., y.r. 45*l.* 900

NORTON, TRIST & GILBERT.

Willesden.—Hazel-rd., f.g.r. 18*l.*, reversion in 80 yrs. 450

ROBINS, GORE & MERCER.

Westminster.—59 and 60, York-st., area 1,170 ft., f., w.r. 161*l.* 4*s.* 2,000

STIMSON & SONS.

Brixton.—14 and 15, Pope's-rd., u.t. 64½ yrs., g.r. 10*l.*, y.r. 72*l.* 585
Herne Hill.—46, Spenser-rd., u.t. 63 yrs., g.r. 6*l.*, y.r. 30*l.* 315
Forest Gate.—135, Sebert-rd., u.t. 81 yrs., g.r. 5*l.* 10*s.*, e.r. 32*l.* 305
Hackney.—10 and 12, Pigwell-path, u.t., 73¾ yrs., g.r. 11*l.*, w.r. 70*l.* 4*s.* 420
New Cross.—17 and 18, Eckington-gdns., u.t. 72 yrs., g.r. 8*l.*, w.r. 62*l.* 8*s.* 550
Norwood.—1a, Apsley-rd., f., w.r. 46*l.* 16*s.* 490
Paddington.—22, Victoria-st., u.t. 48 yrs., g.r. 6*l.* 10*s.*, y.r. 37*l.* 485
4 and 6, Hethpool-st., u.t. 35 yrs., g.r. 14*l.* 14*s.*, y.r. 70*l.* 620
Regent's Park.—41, Redhill-st., with blacksmith's shop, &c., u.t. 21½ yrs., g.r. 3*l.* 7*s.* 4*d.*, y.r. 70*l.* 520
South Kensington.—25, 27 and 29, Rutland-st., f., w.r. 89*l.* 14*s.* 760

TRESIDDER & CO.

Norwood.—239, 241 and 243, Gipsy-rd. (S.), f., y.r. 117*l.* 10*s.* 1,750

VARLEY & LOCKING.

Stoke Newington.—57, Palatine-rd., u.t. 70 yrs., g.r. 6*l.*, y.r. 32*l.* 3 0
Highbury.—32, Canning-rd., u.t. 67 yrs., g.r. 5*l.* 5*s.*, w.r. 46*l.* 10*s.* 265

WESTON & SONS.

Westminster.—28½, Maraham-st. (S.), f., y.r. 40*l.* 1,170
Camberwell.—44, Benhill-rd., f., e.r. 65*l.* 870
46 and 48, Benhill-rd., f., y.r. 68*l.* 1,140
16, Benhill-rd., u.t. 69 yrs., g.r. 5*l.*, w.r. 39*l.* 320

October 30.—ABERCROMBIE & EDMUNDS.

Brondesbury.—13, Burton-rd., u.t. 82 yrs., g.r. 10*l.*, y.r. 52*l.* 10*s.* 550

ALDRIDGES'.

Tottenham.—Hartington-ter., f.g.r. 43*l.*, reversion in 38 yrs. 940

H. H. COLLIER.

Tolworth, Surrey.—Ewell-rd., Woodside Cottages, (two), and Broadway House, f., e.r. 110*l.* 1,500

CRONKS'.

Hampstead.—76, Messina-av., u.t. 80 yrs., g.r. 8*l.*, y.r. 45*l.* 495
Lewisham.—High-st., Sion House, and 0 a. 2 r. 8 p., f., p. 2,200

DOLMAN & PEARCE.

Haverstock Hill.—44, 48, 50 and 93, Queen's-cres., u.t. 46 yrs., g.r. 32*l.*, y.r. 180*l.* 1,675

OGDEN, SONS & OLLEY.

Wimbledon.—Vineyard Hill-rd., Wye Lodge, f., p. 1,600

D. SMITH, SON & OAKLEY.

Enfield.—Ridgway-rd., a freehold building estate, with three cottages thereon, 31 a. 3 r. 23 p.... 4,100
Old Kent Road.—Nos. 704, 706, &c., f.g.r. 170*l.*, u.t. 18 yrs., g.r. 6*l.* 940

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold gound-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent; av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beer-house; p.h. for public-house; o. for offices; s. for shops.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

	£	s.	d.			
Hard Stocks	1	16	6	per 1,000	alongside,	in river
Rough Stocks and Grizzles	1	13	0	"	"	"
Facing Stocks	2	12	0	"	"	"
Shippers	2	5	0	"	"	"
Flettons	1	11	0	"	at railway	depôt
Red wire Cuts	1	13	0	"	"	"
Best Fareham Red	3	12	0	"	"	"
Best Red Pressed Ruabon Facing	5	0	0	"	"	"
Best Blue Pressed Staffordshire	4	5	0	"	"	"
Do. Bullnose	4	11	0	"	"	"
Best Stourbridge Fire Bricks	4	8	0	"	"	"
GLAZED BRICKS.						
Best White and Ivory Glazed Stretchers	13	0	0	"	"	"
Headers	12	0	0	"	"	"
Quoins, Bullnose, and Flats	17	0	0	"	"	"
Double Stretchers	19	0	0	"	"	"
Double Headers	16	0	0	"	"	"
One Side and two Ends	19	0	0	"	"	"
Two Sides and one End	20	0	0	"	"	"
Splays, Chamfered, Squints	20	0	0	"	"	"
Best Dipped Salt Glazed Stretchers and Headers	12	0	0	per 1,000	at railway	depot.
Quoins, Bullnose, and Flats	14	0	0	"	"	"
Double Stretchers	15	0	0	"	"	"
Double Headers	14	0	0	"	"	"
One Side and two Ends	15	0	0	"	"	"
Two Sides and one End	15	0	0	"	"	"
Splays, Chamfered, Squints	14	0	0	"	"	"
Second Quality White and Dipped Salt Glazed	2	0	0	"	less than best.	

	s.	d.	
Thames and Pit Sand	6	9	per yard, delivered.
Thames Ballast	6	0	" "
Best Portland Cement	20	0	per ton, delivered.
Best Ground Blue Lias Lime	20	6	" "

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime ..... 12*s.* 0*d.* per yard, delivered.
Stourbridge Fire Clay in sacks 27*s.* 6*d.* per ton at rly. dpt.

STONE.

	s.	d.	
BATH STONE—delivered on road waggons, Paddington depôt	1	6½	per ft. cube.
Do. do. delivered on road waggons, Nine Elms Depôt	1	8½	" "
PORTLAND STONE (20 ft. average)—			
Brown Whitbed, delivered on road waggons, Paddington depôt, Nine Elms depôt, or Pimlico Whraf	2	1	" "
White Basebed, delivered on road waggons, Paddington depôt, Nine Elms depôt, or Pimlico Wharf	2	2½	" "

	s.	d.	
Ancaster in blocks	1	11	per ft. cube, deld. rly. depôt
Beer in blocks	1	6	" "
Greenshill "	1	10	" "
Darley Dale in blocks	2	4	" "
Red Corsehill "	2	5	" "
Closeburn Red Freestone	2	0	" "
Red Mansfield "	2	4	" "

YORK STONE—*Robin Hood Quality.*

	s.	d.	
Scappled random blocks	2	10	per ft. cube, deld. rly. depôt
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2	3	per foot super. "
6 in. Rubbed two sides Ditto, Ditto	2	6	" "
3 in. Sawn two sides slabs (random sizes)	0	11½	" "
2 in. to 2½ in. Sawn one side slabs (random sizes)	0	7½	" "
1½ in. to 2 in. ditto, ditto	0	6	" "
Scappled random blocks	3	0	per ft. cube "
6 in. sawn two sides, landings to sizes (under 40 ft. sup.)	2	8	per ft. super. "
6 in Rubbed two sides Ditto	—		" "
3 in. sawn two sides slabs (random sizes)	1	2	" "
2 in, self-faced random flags	0	5	" "

Hopton Wood (Hard Bed) in blocks 2 3 per ft. cube.
" " " 6 in. sawn both sides landings 2 7 per ft. super. deld. rly. depôt.
" " " 3 in. do. 1 2½ " "

SLATES.

in.	in.		£	s.	d.	
20×10	best blue Bangor		13	2	6	per 1000 of 1200 at rly. dep.
20×12	"	"	13	17	6	" "
20×10	best seconds	"	12	15	0	" "
20×12	"	"	13	10	0	" "
16×8	best	"	7	0	0	" "
20×10	best blue Portmadoc		12	12	6	" "
16×8	best blue Portmadoc		6	12	6	" "
20×10	best Eureka unfading green		15	2	6	" "
20×12	best Eureka unfading green		17	2	6	" "
18×10	"	"	12	10	0	" "
16×8	"	"	10	5	0	" "
20×10	permanent green		11	10	0	" "
18×10	"	"	9	10	0	" "
16×8	"	"	6	10	0	" "

[*See also next page*

CONTRACTS AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open, but not included in this List, see previous issues.)

CONTRACTS.

Nature of Work or Materials.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be delivered
Additions to Schools, Nantygio, Wales	Aberystruth School Board	R. L. Roberts, Architect, Aberdare	Nov. 9
Alterations to Laundry at Workhouse	Norwich Guardians	Morgan & Buckingham, Architects, Norwich	do.
Footbridge, East Field and Low Buston	Alnwick R.D.C.	H. W. Walton, Council Offices, Alnwick	do.
Paving Works, Holbeck	Leeds Corporation	City Engineer, Municipal Offices, Leeds	Nov. 10
Street Works, Kimberley-road, Liscard, Cheshire	Wallasey U.D.C.	Engineer, Public Offices, Egremont, Cheshire	do.
Paving Works, &c., Lister-road and others	Keighley Corporation	W. H. Hopkinson, Civil Engineer, Town Hall, Keighley	do.
Hospital	Wallingford & Crowmarsh Hos. Bd.	S. Couch-Johns, Civil Engineer, Reading	do.
Cast-iron Water Storage Tank (15,000 gallons)	Gravesend Town Council	C. F. McInnes, Engineer, Electricity Works, Gravesend	do.
Fire Station	Moss Side (Lancs) U.D.C.	H. B. Longley, Civil Engineer, Council Offices, Moss Side	Nov. 11
Additions to Offices, Stockport-road	Levenshulme (Lancs) U.D.C.	J. Jepson, Architect, Tiviot Dale, Stockport	do.
Twelve Houses, Penycoedcae, Wales	Building Club	A. Bryant, Architect, Midland Bank Buildings, Pontypridd	do.
Street Works	Barrow-in-Furness Corporation	Borough Engineer, Town Hall, Barrow-in-Furness	do.
Reconstructing Workhouse Infirmary	St. Columb (Cornwall) Guardians	J. Edmor & Sons, Architects, Newquay	do.
Organ Chamber, &c., Pembroke Chapel, Cardiff	Welsh Calvinistic Methodists	T. Thomas, 23, Queen-street, Cardiff	do.
Trench Works (3,027 yards Trench)	Winsford (Cheshire) U.D.C.	J. Wilkinson, Engineer, Market-place, Winsford, Cheshire	do.
Reparation River Bank (2¼ miles) Soctton Delph, Lincs	Trustees	Thropp & Harding, Engineers, 29, Broadgate, Lincoln	do.
Retorts, Firebricks, &c.	Bradford (Yorks) Corporation	F. Stevens, Town Clerk, Town Hall, Bradford	Nov. 12
Dispensary, &c.	Antrim (Ireland) Guardians	N. Fitzsimons, Architect, 82, Royal Avenue, Belfast	do.
Quartzite Macadam (1,350 tons)	Bexhill Corporation	Borough Engineer, Town Hall, Bexhill	Nov. 13
Street Works, Denmark and other streets	Lancaster Corporation	J. C. Mount, Borough Surveyor, Town Hall, Lancaster	Nov. 14
Stone Wall, Bowerham	do.	do.	do.
Cloak Room at Schools, Darfield, Yorks	.....	A. B. Linford, Architect, Carlton Villa, Wombwell	do.
Street Works	Blackpool Corporation	J. S. Brodie, Borough Surveyor, Blackpool	do.
Road Works, Cliveden-road and others	Wimbledon U.D.C.	C. H. Cooper, Civil Engineer, Council Offices, Wimbledon	do.
*Terra Cotta for New Council School	Salford Education Committee	H. Lord, Architect, 42, Deansgate, Manchester	Nov. 16
Water Supply Works, Bannock Burn	Grangemouth Town Council	Warren & Stuart, Civil Engineers, 94, Hope-street, Glasgow	do.
Cast-Iron Pipes (3,465 tons)	do.	do.	do.
Library, Middleton-road, near Oldham	Chadderton U.D.C.	Groome & Grant, Architects, 2, St. Peter's-square, Manchester	do.
Street Works, Nursery and Camp Streets	Wolverhampton Corporation	Borough Engineer, Town Hall, Wolverhampton	do.
Caretaker's House, Boundary Walls, &c.	Ebbw Vale U.D.C.	T. J. Thomas, Surveyor, Council Offices, Ebbw Vale, Mon.	do.
Sinking Trial Holes, Cwm Carne, Beaufort	do.	do.	do.
Road, &c., Stramshall	Uttoxeter R.D.C.	J. Preston, Surveyor, Woodlands, Uttoxeter	do.
Additions to Offices, Manor-road	Bradford Guardians	Empsall & Clarkson, Architects, 7, Exchange, Bradford	do.
Alterations to Police Station, Normanton	West Riding County Council	J. Vickers Edwards, County Offices, Wakefield	do.
Iron Fencing and Gates at Workhouse	Warwick Guardians	F. P. Trepess, Architect, 1, Church-street, Warwick	do.
Additions to Premises, Castletownbere, Ireland	.....	P. F. Hynes, Architect, 71, South Mall, Cork	do.
Railings, Conveniences, &c.	Middleton (Lancs) Corporation	W. Welburn, Borough Surveyor, Town Hall, Middleton	do.
Granite Road Metal	Sevenoaks R.D.C.	S. Towlson, Civil Engineer, Argyle-road, Sevenoaks	do.
Terra Cotta for Council School, West Liverpool-street	Sendley Education Committee	H. Lord, Architect, 42, Deansgate, Manchester	do.
Bridge Works over River Avon	Bristol Docks Committee	W. W. Squire, Engineer, Cumberland-road, Bristol	do.
Brick Wall, Stanley-road	Bootle (Lancs) Corporation	R. J. Wolfenden, Civil Engineer, Town Hall, Bootle	Nov. 18
*Additional House at Felixstowe Coast Guard Station	The Admiralty	Director of Works Department, 21, Northumberland-avenue, W.C	Nov. 20
School, Reginald-road, Eastney	Portsmouth School Board	G. E. Smith, Architect, 145, Victoria-road, North Southsea	do.
*Water Supply Works	Rochford R.D.C.	Council's Engineer, Rochford, Essex	Nov. 23
*Making-up Streets	West Ham Council	Borough Engineer, Town Hall, West Ham, E.	Nov. 24
Storage Reservoir, Markland's	Horwich (Lancs) Guardians	P. Taberner, Council Offices, Horwich	Nov. 25
*Works of Sewerage	Lichfield Corporation	Elliott & Brown, Burton-buildings, Parliament-street, Nottingham	Nov. 27
Rebuilding Shop and Premises, Victoria-rd., Ebbw Vale	Mr. Stephen Lewis	B. J. Francis, Architect, Abergavenny	No date.
Arcade Premises, High-street, Newport, Mon.	.....	Habershon, Fawckner, & Co., 41, High-street, Newport	do.
Road Works, Surbiton Hill	.....	W. E. Hewitt, Surveyor, 22, Buckingham-street, W.C.	do.
Detached Cottages, Adel, Leeds	.....	G. W. Atkinson, Architect, 1, Mark-lane, Leeds	do.
Brickwork, Acton	.....	Barnett & Co., 68, Salisbury-road, West Kilburn	do.
Gas Mains, &c., at Schools	.....	G. Moxon, Architect, 26, Church-street, Barnsley	do.
Pavilion, Rhyl, Wales	.....	Tilby & Jones, Town Hall, Rhyl	do.
Offices & Stabling, Victoria Wks., Pitt-st., Horley Hill	.....	Burton & Percival, Arch'ts, 150a, Stamford-st., Ashton-under-Lyne	do.
*Heating Main Block of Union House	Stow Union	J. S. Corder, Architect, Tower-street, Ipswich	do.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Required.	Salary.	Applications to be in
*Clerk of the Works	Chelmsford Corporation	2l. 3s. per week	Nov. 12
*Architectural Assistant	Rochdale Corporation	2l. 10s. per week	Nov. 14
*Chair of Architecture	Liverpool University	See advertisement	Dec. 31

Those marked with an asterisk (*) are advertised in this Number. *Contracts*, iv, vi. viii. & x. *Public Appointments*, xvi.

PRICES CURRENT (*continued*).

TILES.

	s.	d.		
Best plain red roofing tiles	42	0	per 1,000	at rly. depot.
Hip and valley tiles	3	7	per doz.	" "
Best Broseley tiles	50	0	per 1,000	" "
Do. Ornamental Tiles	52	6	"	" "
Hip and Valley tiles	4	0	per doz.	" "
Best Ruabon Red, brown or brindled Do. (Edwards)	57	6	per 1,000	" "
Do. Ornamental Do.	60	0	"	" "
Hip tiles	4	0	per doz.	" "
Valley tiles	3	0	"	" "
Best Red or Mottled Staffordshire Do. (Peakes)	51	9	per 1,000	" "
Do. Ornamental Do.	54	6	"	" "
Hip tiles	4	1	per doz.	" "
Valley tiles	3	8	"	" "
Best "Rosemary" brand plain tiles	48	0	per 1,000	" "
Do. Ornamental Do	50	0	"	" "
Hip tiles	4	0	per doz.	" "
Valley tiles	3	8	"	" "

WOOD.

	At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.	15 10 0	16 10 0
Deals: best 3 by 9	14 10 0	15 10 0
Battens: best 2½ in by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	11 10 0	12 10 0

PRICES CURRENT—(*continued*).

WOOD.

	At per standard. £ s. d.	£ s. d.
Battens: best 2½ by 6 and 3 by 6	0 10 0	less than 7 in. and 8 in.
Deals: seconds	1 0	0 less than best
Battens: seconds	0 10 0	" " "
2 in. by 4 in. and 2 in. by 6 in.	9 0 0	9 10 0
2 in. by 4½ in. and 2 in. by 5 in.	8 10 0	9 10 0
Foreign Sawn Boards—		
1 in. and 1¼ in. by 7 in.	0 10 0	more that battens.
4 in.	1 0 0	"
Fir timber: Best middling Danzig or Memel (average specification)	At per load of 50 ft. 4 10 0	5 0 0
Seconds	4 5 0	4 10 0
Small timber (5 in. to 10 in.)	3 12 6	3 15 0
Small timber (6 in. to 8 in.)	3 0 0	3 10 0
Swedish balks	2 15 0	3 0 0
Pitch-pine timber (30 ft. average)	3 5 0	3 15 0

JOINERS' WOOD.

	At per standard. £ s. d.	£ s. d.
White Sea: First yellow deals, 3 in. by 11 in.	23 0 0	24 0 0
3 in. by 9 in.	21 0 0	22 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0	18 10 0
Second yellow deals, 3 in. by 11 in.	18 10 0	20 0 0
" " 3 in. by 9 in.	17 10 0	19 0 0
Battens, 2½ in. and 3 in. by 7 in.	13 10 0	14 10 0
Third yellow deals, 3 in. by 11 in. and 9 in.	15 10 0	16 10 0
Battens, 2½ in. and 3 in. by 7 in.	11 10 0	12 10 0

PRICES CURRENT (*continued*).

WOOD.

	At per standard. £ s. d.	£ s. d.
Petersburg: first yellow deals, 3 in. by 11 in.	21 0 0	22 10 0
Do. 3 in. by 9 in.	18 0 0	19 10 0
Battens	13 10 0	15 0 0
Second yellow deals, 3 in. by 11 in.	16 0 0	17 0 0
Do. 3 in. by 9 in.	14 10 0	16 0 0
Battens	11 0 0	12 10 0
Third yellow deals, 3 in. by 11 in.	13 10 0	14 0 0
Do. 3 in. by 9 in.	13 0 0	14 0 0
Battens	10 0 0	11 0 0
White Sea and Petersburg:—		
First white deals, 3 in. by 11 in.	14 10 0	15 10 0
" " 3 in. by 9 in.	13 10 0	14 10 0
Battens	11 0 0	12 0 0
Second white deals, 3 in. by 11 in.	13 10 0	14 10 0
" " 3 in. by 9 in.	12 10 0	13 10 0
" " battens	9 10 0	10 10 0
Pitch-pine: deals	16 0 0	18 0 0
Under 2 in. thick extra	0 10 0	1 0 0
Yellow Pine—First, regular sizes	33 0 0	upwards.
Oddments	22 0 0	24 0 0
Seconds, regular sizes	24 10 0	26 10 0
Yellow Pine Oddments	20 0 0	22 0 0
Kauri Pine—Planks, per ft. cube	0 3 6	0 4 6
Danzig and Stettin Oak Logs—Large, per ft. cube	0 2 6	0 3 6
Small " "	0 2 3	0 2 6
Wainscot Oak Logs, per ft. cube	0 5 0	0 5 6

PRICES CURRENT (*continued*).

WOOD.

	At per standard. £ s. d.	£ s. d.
Dry Wainscot Oak, per ft. sup. as inch	0 0 7	0 0 8
1½ in. do. do.	0 0 6½	—
Dry Mahogany—Honduras, Tabasco, per ft. sup. as inch	0 0 9	0 0 11
Selected, Figury, per ft. sup. as inch	0 1 6	0 2 0
Dry Walnut, American, per ft. sup. as inch	0 0 10	0 1 0
Teak, per load	17 0 0	21 0 0
American Whitewood Planks—per ft. cube	0 4 0	—
Prepared Flooring—	Per square.	
1 in. cy 7 in. yellow, planed and shot	0 13 6	0 17 6
1 in. by 7 in. yellow, planed and matched	0 14 0	0 18 0
1¼ in. by 7 in. yellow, planed and matched	0 16 0	1 1 6
1 in. by 7 in. white, planed and shot	0 11 6	0 13 6
1 in. by 7 in. white, planed and matched	0 12 0	0 14 0
1¼ in. by 7 in. white, planed and matched	0 14 6	0 16 6
⅞ in. by 7 in. yellow, matched and beaded or V-jointed boards	0 11 0	0 13 6
1 in. by 7 in. do. do. do.	0 14 0	0 18 0
⅞ in. by 7 in. white do. do.	0 10 0	0 11 6
1 in. by 7 in. do. do. do.	0 11 6	0 13 6

6-in. at 6d. to 9d. per square less than 7-in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	6 5 0 ...	7 5 0
Compound Girders, „ „	8 2 6 ...	9 5 0
Angles, Tees and Channels, ordinary sections	7 17 6 ...	8 17 6
Flitch Plates	8 5 0 ...	8 15 0
Cast Iron Columns and Stanchions, including ordinary patterns	7 2 6 ...	8 5 6

METALS.

	Per ton, in London £ s. d.	£ s. d.
IRON—		
Common Bars	7 10 0 ...	8 0 0
Staffordshire Crown Bars, good merchant quality	8 0 0 ...	8 10 0
Staffordshire "Marked Bars"	10 10 0 ...	—
Mild Steel Bars	8 15 0 ...	9 5 0
Hoop Iron, basis price	9 5 0 ...	9 10 0
„ „ galvanised	17 10 0 ...	—
(*And upwards, according to size and gauge.)		
Sheet Iron (Black)—		
Ordinary sizes to 20 g.	9 15 0 ...	—
„ „ 24 g.	10 15 0 ...	—
„ „ 26 g.	12 5 0 ...	—
Sheet Iron, Galvanised, flat, ordinary quality—		
Ordinary sizes—6 ft. by 2 ft. to 3 ft. to 20 g	12 15 0 ...	—
Ordinary sizes to 22 g. and 24 g.	13 5 0 ...	—
„ „ 26 g.	14 5 0 ...	—
Sheet Iron, Galvanised, flat, best quality—		
Ordinary sizes to 20 g.	16 0 0 ...	—
„ „ 22 g. and 24 g.	16 10 0 ...	—
„ „ 26 g.	18 0 0 ...	—
Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 8 ft. 20 g.	12 15 0 ...	—
„ „ 22 g. and 24 g.	13 5 0 ...	—
„ „ 26 g.	14 0 0 ...	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker	11 15 0 ...	—
Best Soft Steel Sheets, 22 g. and 24 g.	12 15 0 ...	—
„ „ „ 26 g.	14 0 0 ...	—
Cut nails, 3 in. to 6 in.	9 5 0 ...	9 15 0
(Under 3 in., usual trade extras.)		

LEAD, &c.

	Per ton, in London. £ s. d.	£ s. d.
LEAD—Sheet, English, 3 lbs. and up	14 0 0 ...	—
Pipe in coils	14 10 0 ...	—
Soil pipe	17 0 0 ...	—
Compo Pipe	17 0 0 ...	—
ZINC—Sheet—		
Vieille Montagne ton	26 0 0 ...	—
Silesian	25 15 0 ...	—
COPPER—		
Strong Sheet per lb.	0 0 10½ ...	—
Thin „	0 0 11½ ...	—
Copper nails „	0 0 11 ...	—
BRASS—		
Strong Sheet per lb.	0 0 10 ...	—
Thin „ „	0 0 11 ...	—
TIN—English Ingots „	0 1 4 ...	—
SOLDER—Plumbers' „	0 0 6 ...	—
Tinmen's „	0 0 8 ...	—
Blowpipe „	0 0 9 ...	—

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	2½d. per ft. delivered.
„ fourths	1¾d. „ „
21 oz. thirds	3¼d. „ „
„ fourths	2½d. „ „
26 oz. thirds	3¾d. „ „
„ fourths	3¼d. „ „
32 oz. thirds	4¼d. „ „
„ fourths	4¼d. „ „
Fluted sheet, 15 oz.	2¼d. „ „
„ 21 oz.	3¼d. „ „
½ Hartley's Rolled Plate	1¼d. „ „
⅓ „ „ „	2d. „ „
¼ „ „ „	2¼d. „ „

OILS, &c.

		£ s. d.
Raw Linseed Oil in pipes or barrels	per gallon	0 1 9
„ „ „ in drums	„	0 2 1
Boiled „ „ in pipes or barrels	„	0 2 0
„ „ „ in drums	„	0 2 4
Turpentine, in barrels	„	0 3 8
„ in drums	„	0 3 10
Genuine Ground English White Lead	per ton	19 0 0
Red Lead, Dry	„	19 0 0
Best Linseed Oil Putty	per cwt.	0 8 0
Stockholm Tar	per barrel	1 12 0

PRICES CURRENT (*continued*).

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak Varnish	0 8 0
Pale Copal Oak	0 10 6
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak	0 10 0
Superfine Hard-drying Oak, for seats of Churches	0 14 0
Fine Elastic Carriage	0 12 6
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 16 0
Finest Pale Durable Copal	0 18 0
Extra Pale French Oil	1 1 0
Eggshell Flatting Varnish	0 18 0
White Copal Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size	0 10 6
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 9 0
Brunswick Black	0 8 6
Berlin Black	0 16 0
Knotting	0 10 0
French and Brush Polish	0 10 0

TERMS OF SUBSCRIPTION.

"THE BUILDER" (Published Weekly) is supplied DIRECT from the Office to residents in any part of the United Kingdom, at the rate of 29s. per annum (52 numbers) PREPAID. To all parts of Europe, America, Australia, New Zealand, India, China, Ceylon, &c., 34s. per annum. Remittances (payable to J. MORGAN) should be addressed to the publisher of "THE BUILDER," Catherine-street, W.C.

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TO CORRESPONDENTS.

A. W. B.—W. F.—S. F. H.—(Amounts should have been stated). J. B.—R. H. H.—(Below our limit).

NOTE.—The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications.

Letters or communications (beyond mere news items) which have been duplicated for other journals are NOT DESIRED.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

We are compelled to decline pointing out books and giving addresses.

Any commission to a contributor to write an article, or to execute or lend a drawing for publication, is given subject to the approval of the article or drawing, when received, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

All communications regarding literary and artistic matters should be addressed to THE EDITOR; those relating to advertisements and other exclusively business matters should be addressed to THE PUBLISHER, and not to the Editor.

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Nat. Tel. 6112 Gerrard. Telegrams, "The Builder, London."

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Advertisements for the current week's issue are received up to TEN o'clock p.m. on THURSDAY, but "Classification" is impossible in the case of any which may reach the Office after HALF-PAST ONE p.m. on that day. Those intended for the Outside Wrapper should be in by TWELVE noon on WEDNESDAY.

ALTERATIONS IN STANDING ADVERTISEMENTS or ORDERS TO DISCONTINUE same must reach the Office before TEN o'clock on WEDNESDAY MORNING.

The Publisher cannot be responsible for DRAWINGS, TESTIMONIALS, &c. left at the Office in reply to advertisements, and strongly recommends that of the latter COPIES ONLY should be sent.

PERSONS Advertising in "The Builder" may have *Replies addressed to the Office*, Catherine-street, Covent Garden, W.C. *free of charge*. Letters will be forwarded if addressed envelopes are sent, together with sufficient stamps to cover the postage. Unused stamps are returned to advertisers the week after publication.

AN EDITION Printed on THIN PAPER, for FOREIGN and COLONIAL CIRCULATION, is issued every week.

READING CASES, { NINEPENCE EACH. By Post (carefully packed) 1s.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 10 *a.m. on Thursdays*. [N.B.—We cannot publish Tenders unless authenticated either by the architect or the building-owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is given, nor any list in which the lowest Tender is under 100*l.*, unless in some exceptional cases and for special reasons.]

* Denotes *accepted*. † Denotes *provisionally accepted*.

ABERDEEN (N.B.).—For the supply of 1,000 tons Portland cement, for the Harbour Commissioners. Mr. R. Gordon Nichol, Engineer, Aberdeen:—
W. H. Turcan, Glasgow ..... £1 10 6 per ton.

ASHINGTON (Northumberland).—For additions to bakery, &c., for the Industrial Co-operative Society, Ltd. Mr. Wm. J. Charlton, architect, Ashington:—

Hunn & McGregor	£552 14	Cocks Bros, Waterloo, Blyth	£538 10
Mackenzie & Doble	540 0		

BECKENHAM.—For the execution of road works, Oakhill and Kelsey Park roads, for the Urban District Council. Mr. John A. Angell, Surveyor, Council Offices, Beckenham:—

Fry	£1,479 5	Pearce	£1,236 19
Woodhams	1,301 0	Mowlem & Co.	1,242 17

BEXHILL (Sussex).—For the execution of road works, &c., Cantelupe and other roads, for the Corporation. Mr. Geo. Ball, C.E., Borough Surveyor, Town Hall, Bexhill:—

A. C. Soan	£3,773 17 11	Peerless, Dennis, & Co.	£2,219 0 0
Wimpey & Co.	2,870 0 0	Peters & Co.	2,016 14 9
G. T. Jenkins	2,797 0 0	Stephen Carey, Bexhill*	1,870 13 0
Thos. Adams	2,225 10		

CARLISLE.—For the erection of four houses, Eldred-street, for Messrs. R. Black & Son. Mr. H. H. Hodgkinson, architect, 9, Lowther-street, Carlisle:—

Building.—Gordon & Logan, Lamplugh-street*	£405 12 0
Joinery.—Black & Son, West Walls*	(owners)
Plumbing.—J. W. Smith, Globe-lane*	90 0 0
Plastering.—Ferguson & Son, Denton-street*	134 0 0
Slating.—J. Hewitson, St. Nicholas*	65 10 0
Painting.—S. Allan, Globe-lane*	46 2 6
Ironwork.—J. & J. Wharton, Mary-street*	18 0 0

[Estimated value of joiners' work, £290.]

DORCHESTER.—For building The New Compasses Inn, for Messrs. Jno. Groves & Sons, Ltd., Weymouth. Mr. A. L. T. Tilley, architect, 23, South-street, Dorchester:—
C. E. Slade, Dorchester* £1,773

DORCHESTER.—For alterations and additions at The Castle Inn, for Messrs. Eldridge, Pope, & Co., Ltd., Dorchester. Mr. A. L. T. Tilley, architect, 26, South-street, Dorchester:—

C. E. Slade	£960 0 0
Davis & Son, Dorchester*	922 17 8

DURHAM.—For the execution of sewerage works, &c., High Pittington, for the Rural District Council. Mr. Geo. Gregson, Surveyor, 38, Saddler-street, Durham:—

J. T. Short	£194 0 0	T. H. Skelton	£107 16 7
John Thompson	168 14 3	Robert Oliver, Durham*	102 17 5
John Carrick	144 16 11		
J. G. Bradley	130 0 0		

[Surveyor's estimate, £112.]

EXMOUTH.—For execution of road works, Park-road and other roads, for the Town Council. Mr. Samuel Hutton, Surveyor, Council Offices, Exmouth. Quantities by the Surveyor:—

—	Park-rd.			Back-rd. to Park-rd.			Back-rd. to Bulton Villas.			—		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Grounds & Newton Bournemouth*	630	16	1	329	12	10	70	9	9	1,030	18	8
Hooper & Stooke	691	12	8	391	4	9	83	6	2½	1,166	12	7½
E. P. Duke	816	17	8	411	18	6	86	4	5	1,317	0	5
J. H. Dickson	1,033	14	6	564	10	0	123	7	6	1,723	12	0

GRIMSTONE (Dorset).—For building a farm house, for Mr. Alfred Pope, J.P. Mr. A. L. T. Tilley, architect, 26, South-street, Dorchester:—
Davis & Son, Dorchester* £1,258 12

HULL.—For the erection of thirty-two artisans' dwellings, Steynburg-street, for the Corporation. Mr. Joseph H. Hirst, C.E., Town Hall, Hull:—

H. Kaye	£7,377 0 0	Bowman & Sons	£6,788 0 0
Simpson & Sons	7,375 0 0	Jackson & Sons	6,734 8 0
F. Arnott	7,242 7 8	F. Singleton	6,563 17 8
T. Goates	6,959 0 0	J. H. Fenwick	6,510 9 0
Hill & Stevenson	6,909 11 5	J. R. Woods	6,438 0 0
Good & Sons	6,880 17 4	G. F. Blackburn*	6,364 0 0
G. H. Scorer	6,795 0 0		

[All of Hull.]

[*See also next page.*

LONDON.—For extension of the new infirmary in Acton-lane, Willesden Junction, N.W., for the Guardians of the Poor of Willesden Parish. Mr. Alfred Saxon Snell, architect. Quantities by Messrs. Northcroft, Son, & Nicholson :—

Somerford & Son	£5,629	Ferguson & Co.	£5,120
A. & B. Hanson	5,278	W. Reason	4,997
Kerridge & Shaw	5,263	E. Chamberlain	4,985
G. Gray Hill	5,220	Appleby & Sons	4,947
Cowley & Drake	5,221	Godson & Sons, Pembroke Works, Kilburn-lane, W.*	4,930
Leslie & Co.	5,153		
Lawrence & Son	5,149		

LONDON.—For the erection of blocks D and E Campden Hill Court, Kensington, W. Messrs. Palgrave & Co., architects, Westminster, S.W. :—
C. Gray, Hampstead and Shepherd's Bush* ... £38,100

LONDON.—For the supply of four 5,000-h.-p. engines required for the electricity generating station now being established at Greenwich, for the London County Council electric tramways :—

Willans & Robinson, Ltd.	£131,837	0
Stewart & Co. (1902), Ltd.	109,068	0
" (alternative)	105,492	0
Gourlay Bros., & Co.	107,168	0
Aktieselskabet Burmeister & Wains	105,683	0
Yates & Thom	100,680	0
The Allis Chalmers Co.	99,780	0
Perranti, Ltd.	99,250	0
Musgrave & Sons, Ltd., Bolton*	98,713	0
Davey, Paxman, & Co., Ltd.	96,695	0
A. Borsig (incomplete)	92,995	0
The Wallsend Slipway and Engineering Co., Ltd. (English steel)	92,595	0
Do. do. (German steel)	88,525	0
Cole, Marchent, & Morley, Ltd.	84,921	10
Maschinenfabrik Buckau Aktien-Gesellschaft (not to specification)	58,871	3
Fullerton, Hodgart, & Barclay, Ltd. (incomplete)	36,817	0

MARYBOROUGH (Ireland).—For the erection of a reservoir (in concrete) and laying pipes at asylum, for the Lunacy Commissioners :—
Wm. Carroll, Maryborough ... £350
[With 5s. per yard for 4-in. piping, and 4s. per yard for 3-in. piping.]

PENARTH (Wales).—For the execution of street works, &c., Stanwell-road, for the Urban District Council. Mr. E. J. Evans, C.E., Council Offices, Penarth :—

A. Sims	£201	15	6
Rich & Co.	201	4	11
Thos. Edwards	194	15	7
Chas. Davies	176	17	6
E. Osmond, Great House, Ely, near Cardiff*	£162	3	0

PIDDLETOWN (Dorset).—For building The Blue Vinny Hotel, for Messrs. Jno. Groves & Sons, Ltd., Weymouth. Mr. A. L. T. Tilley, architect, 26, South-street, Dorchester :—
James Selby, Broadmayne, Dorchester* ... £1,936

POOLE (Dorset).—For the execution of sewerage works, &c., for the Town Council. Mr. John Elford, Borough Surveyor, Poole :—
Sewerage Works, Edward-lane.
Gates & Gulliver, Newtown, Poole* ... £49 6 6
Sewerage Works, St. Aldhelms.
G. Maidment, Newtown, Poole* ... £29
Road Works.
T. Budden, Newtown, Poole* ... £238 7 6

PORTSMOUTH.—For the erection of schools, Milton-road, for the Corporation. Messrs. Rake & Cogswell, architects, Prudential Buildings, Landport :—

Cook & Son	£21,995	Clark & Sons	£18,940
Smith & Sons	21,662	Coltherup	18,828
Stephens & Bastow	20,978	Perkins & Durant	18,793
Haslemere Builders	19,682	Salter	18,764
W. Evans	19,600	F. Corke	18,760
F. Privett	19,432	J. Crockerell, Southsea*	18,436
G. J. Davis	19,300		
Sweetland	19,065		

STANNINGLEY (Yorks).—For the erection of a workshop. Mr. Percy Fox, architect, 14, Manchester-road, Bradford :—

Masonry.—J. H. Knight, Farsley	£512	0	0
Joinery.—R. Greenwood, Bingley	238	0	0
Slating.—Hillam Bros., Bradford	144	11	4
Plumbing.—E. Pearson, Farsley	103	10	0
Iron and Steel Work.—R. Hird, Shipley	245	0	0

THURSTONLAND (Yorks).—For the execution of sewage-disposal works, Farnley Tyas, near Huddersfield, for the Urban District Council. Messrs. Haller & Machell, architects, Corporation Chambers, Dewsbury :—

Still & White	£824	1	8
Graham & Sons	812	7	1
Marshall & Sons, Ltd., Ashton-under-Lyne*	£740	19	5

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